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Address.

THE TWO SCIENCES, HUMANITY AND MEDICINE.*

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In the year 1830, in the month of May, the leading physicians of this state met in the city of Nashville and organized the "Medical Society of the State of Tennessee," and wrote on their escutcheon, "The Science of Medicine an Important Department in the Science of Humanity." After the lapse of seventy-two years, at the reorganization in Memphis, and the adoption of the new constitution, the name was changed to that of "Tennessee State Medical Association," but the motto remained unchanged. It is well. Truth changes not. Time and progress have wrought changes innumerable within the last three-quarters of a century, which corresponds with the life of this association, but have only added emphasis to the truth contained in this motto.

The thought occurred to me to say something on this occasion in regard to the relationship of the science of medicine to the science of humanity; hence the adoption of this motto, in slightly abridged form, as the title of this address.

Science, in its most primitive sense, is to know. To know medicine involves the science of humanity. To know humanity is, therefore, fundamental to medical science, without which medicine at once ceases to be a science, and as it has been observed in all history, is a heterogeneous mixture of witchcraft, superstition, charlatanism, empiricism, fanaticism and deception.

In direct ratio as the knowledge of individual and collective humanity increases does medicine become more and more a science.

Humanity implies a physical, mental and moral being; "a material body, an immaterial mind and an immortal soul." These three elements, although distinct, are strangely blended to make man. So intimate is their connection, so intricate the process by which they are interwoven, that no proper conception can be had of mankind, by the study of one of these elements to the exclusion of the others. We must comprehend the fact that all impressions and influences, made either from within or without the man, involve his threefold character.

Errors are not uncommon in this regard, in the application of the science, or, if you please, the art, or practice of medicine. To regard man only from a physical standpoint leads to errors, both in regard to the causes and the cure of his diseases. To regard him as mind only, and conclude that all his ailments are mental or imaginary, leads to the most erratic conclusions, and to the inexcusable and criminal neglect of material agencies, whereby the loss of life may result, instances of which are not uncommon, even in this enlightened age and under our own observation.

To dwell only on that which is immortal; to regard the soul only; to look on all diseases as the result of immorality and sin, leads to the most fanatical practices, fraught with great evils to both body and mind, and may result in the overthrow of the soul itself.

In the application, then, of the science of medicine, due regard must be paid the body as a great complex mechanism, a co-ordination of the physical forces of which is so essential to the welfare of the whole. We must consider that the mind wields a large influence over the body, both in health and disease, and our therapeutics must include agencies whose effects are mental in their application, as well as those which are physical.

To administer to a mind diseased; to bind up the wounds which sorrow has made; to sympathize with distress; to inspire hope and strengthen confidence are among the most difficult problems of medical men, a proper solution of which may bring healing and health to the body. Not the least of the three factors is the soul of man. That which is neither physical or mental, but a distinct entity, breathed into man by the Infinite, and creating him a moral being. The causation of some of the most unmanageable diseases, both of the body and mind, is traceable to immorality, the cure of which is improbable, if not impossible, unless the moral perversion can be overcome. We conclude, then, that only by the diligent study of individual man, physical, mental and moral—can we have the knowledge or science of humanity that is so essential to the application of the science or knowledge of medicine. All rational therapeutics have their basis on these principles; all else is empiricism.

What think you, then, of a physician (so-called) who presumes to administer remedies to those who fall by the wayside in the struggle of life, who knows but little of the body, less of the mind, and who cares nothing for the soul? What would you think of a man who, knowing absolutely nothing of a locomotive, should mount the cab of an engine, to which is attached a train of cars laden with human freight, and with a reckless daring, born of ignorance, should open wide the throttle, and perchance hurl the unsuspecting passengers to death? Before a man may run an engine he must study long days and weeks and months under a master. He begins by wiping off the engine, studies each piece of the ponderous machine, becomes familiar with every wheel,

* President's address, delivered before the Tennessee State Medical Association at its annual meeting in Chattanooga.

piston, cog and valve. He must understand the gauges, the brakes, the signals, the power of the mighty iron horse, indeed, everything connected with the mechanism of locomotion, and even then he is not competent until he shall have taken his stand by the engineer and gone over the road again and again, observed every switch, bridge and landmark, and even then he assumes the position with fear and trembling at the mighty responsibility. This law of qualification applies to every avocation, and is prerequisite to every business or undertaking.

So should it be with the physician, or with anyone who assays to administer remedies to the diseases of tripartite man. He begins, perchance, sweeping the office and arranging the books and instruments of his preceptor. He spends weary months and years acquiring a knowledge of the structure of the body. With scalpel and forceps, in the weird light of the dead room, he dissects the brain, the heart, the lungs; indeed, all the organs of the body; observes their size, their structure, their position and relationship to other organs, their blood and nerve supply, then traces the source and distribution of every artery, vein and nerve, studies the bony framework of the body, its muscles, joints and ligaments, and then, with microscope in hand, looks down into the ultimate cells, scrutinizes the constituents of the blood—the very source of life—compares healthy with diseased structure, and learns to distinguish the normal from the abnormal.

But his work is just begun. Turning to his physiology, he must know the offices performed by the various organs, the character of the secretions and excretions, the processes of waste and repair, the functions of digestion and assimilation, of respiration and circulation. Then, through the biologic laboratory, study the germs of disease and behold their work of propagation, and the manner of their subtle invasion and destruction of the tissues and organs of the body in their hidden fastnesses. He must also know material medicine, the character and properties of drugs, their action on the human economy, their incompatibilities, their poisonous effects and antidotes. If a surgeon, he must, in addition to all this, understand the technic, the instruments required, and the elaborate principles of asepsis and antisepsis involved in an operation. Then, again, the student must acquaint himself with the more delicate subjects of conception, the growth and development of the fetus in the uterus, the process of parturition, the advent of the newborn child, its needs, together with those of the mother, at that critical and trying period.

He must take his stand at the bedside of the sick and injured, and study disease in its different stages and manifestations; the indications for treatment, the dangers, immediate and remote, the diseases peculiar to infancy, middle life and old age, the natural changes that occur in the body during the periods of growth and decline. He must consider also the mental and moral traits of the patient, his environments, his habits, his hereditary predispositions and tendencies to particular diseases. He must also cultivate in the sick room a professional mannerism, exhibit a confidence in his own ability and resources by which he inspires confidence in the patient and attendants.

Notwithstanding that the chief mission of the physician is to cure disease, if possible, he will often be brought face to face with conditions that defy his best-directed efforts and are hopelessly incurable. But even after all his resources have been exhausted, the true physician does not forsake his patient. But when in the shadow of an overwhelming fate he recognizes the approach of the relentless messenger as he comes to summons the soul to its final account, he should soothe the pain and anguish of dissolution, and point the weary sufferer through the darksome portals that mark the end of this mortal span, but which open the entrance to the land Elysian.

After all this preparation, and much more not laid down in books or "nominated in the bond," a man with a conscience enters on the duties of doctor of medicine with a sense of obligation and responsibility well nigh paralyzing.

Contrast, if you please, this student, well bred in the sciences of humanity and medicine, with the conscienceless quack, the presumptuous charlatan or the greedy and avaricious manufacturer of secret and patent medicines, who are in the business of tampering with human lives, not for the study of the science of medicine, as applied to human needs, but like the would-be statesman in defining his position, favored a "tariff for revenue only."

But you say: "Why do people allow themselves to be imposed on by the pretender in medicine, and why do they buy and use drugs of which they know nothing and for the administration of which no one is responsible?" There are several reasons. As far back as we have any account of the human race there has existed in the mind a disposition to fathom the mysterious and to experiment with the unknown; it was this that led Mother Eve "to partake the fruit of that forbidden tree, whose mortal taste brought death into this world, and all our woe." Then, again, for thousands of years of the world's history medicine as a science had no existence, the treatment of disease being a mixture of witchcraft, incantation, exorcism, deception and cruel imprisonment or banishment. From that dark age of mythology and superstition the human mind has emerged very slowly. Errors easily find lodgment in the mind which require great effort and hundreds of years of time to eradicate, people preferring to hug the delusions of the fathers rather than accept a scientific truth.

There is also a kind of credulity in the human mind easily played on by the fair promises and assurances, the flaming advertisements and attractive chromos, which are a necessary adjunct to the success of the quack and patent-medicine man. Again, there is magic in printer's ink. People are prone to accept as fact what they see in print.

Contributory to this patent-medicine frenzy are the certificates of public men, even ministers of the gospel indorsing this stupendous folly. The apology we would offer for these is that, however wise and good they may be on other lines, they know nothing in regard to medical science, and in any court of the country their testimony would be ruled out on the score of incompetency. There are also church papers, and even some medical journals that allow (for a consideration) space in their publication to advertise these frauds. Ministers of the gospel and church papers need be more cautious lest they become accessory to the formation of most pernicious drug habits. People attach much importance to the opinions of ministers and the indorsements of the religious press.

There is just one other class of which we would speak, but with diffidence, for he is our brother, and for him we entertain a good degree of regard and would

not, wantonly, wound his sensibilities, but we have heard it said that some real physicians do now and then permit the use of, and have actually been known to prescribe a preparation, a medicine (so-called) a something, the ingredients of which were entirely unknown to them, and that there have appeared in certain quarters certificates from doctors indorsing such nostrums. Is it possible?

I know that my brother is sorely tempted, for the ubiquitous agent besieges his office day after day with an exhibition of his wares, extravagantly loads his table with samples and is persistent in his praises of the virtues of the articles contained in the cartooned packages, ready made for all the ills to which human flesh is subject. But, brother, as in moral and spiritual matters, there is a way of escape from temptation by resisting the powers of darkness and ignorance. So in the practice of your art, you can escape the clutches of the commercial medicine man by confidence in and fidelity to our noble science. Thereby you will contribute to the best interests of your clientele, maintain your self-esteem and advance the honor and dignity of your profession.

The medical profession condemns these patent nostrums, and the methods of quacks, advertising specialists and impostors, not because of their interference with the business or financial interest of the physician, but for the same reason that we urge medical legislation for the protection of the health and lives of the people. Men of medical science know the pernicious effects of the narcotics and stimulants contained in many of these mercantile preparations and nostrums. The cunning manufacturer well understands how to increase the sale of his wares by loading them with drugs that entail habits and thereby his preparation creates its own demand. He is in the business for money.

On the other hand, every law on the statute books relative to the prevention of disease, the arrest of epidemics, quarantine regulations, the organization of state boards of health, the United States Marine-Hospital Service, the institution of the various public health associations, prison reform, the erection and equipment of hospitals for the insane, blind and disabled, every sanitary regulation—state, county and municipal—have had their origin in the medical profession and received the hearty support of medical men everywhere, and that without the hope of fee or reward. Yet humanity, bleeding from every pore, suffering from all sorts of imposition, from quacks, impostors, nostrums venders, faith cures, *et id omne genus*, repeats again and again the cry that rang out in the oriental court of a Roman governor on a certain momentous occasion: "Give us Barabbas! Give us Barabbas!" The historian of those times incidentally mentions the fact that this Barrabbus was a robber.

Again, the tendency to disregard the injunctions of medical advice and to violate the most common principles of the laws of health, is a marked characteristic of humanity. Physicians and health officers have often been seriously handicapped and blamed for inefficiency, when in reality, alleged failures were occasioned by indifference to their suggestions. In the writer's own county, a few years ago, a case of smallpox was found in the practice of a competent physician, who immediately reported the case to the county board of health, and urged the necessity of isolation and quarantine of the patient, together with all who had been exposed to the contagion, and the vaccination of the community in which the case occurred. After considerable trouble and delay, this was accomplished, but only a few days afterward the county judge, in the face of the protest of the health officers, dismissed the guards and turned the infected negroes loose on the town and country. The result of this blunder was to precipitate an epidemic of smallpox that cost the county some forty thousand dollars, to say nothing of the loss of life and the suffering from a loathsome disease. Another melancholy incident of the kind occurred in the neighborhood of this city (Chattanooga) during the Spanish-American War, when the flower of American manhood encamped at Chickamauga were stricken down with a preventable disease and died by the score, not on account of the inefficiency of the medical staff, but because of the total and offensive disregard of their advice, by an arbitrary commanding officer.

Not only is there this indifference in regard to medical science as it relates to humanity, but there exists a spirit, especially among some aspirants for political office, a kind of pandering to the unlearned—a species of demagogery, of you please—in order to secure or maintain official position. This class of men, as a rule, are opposed to all progress in matters of science; they draw the line at what they are pleased to call innovations, and claim to have great love for the dear people. You will find them opposed to medical-practice laws, opposed to vaccination, opposed to sanitary regulations, not in sympathy with health boards or quarantine regulations, opposed to all sorts of prohibitory measures and reform movements. This character has been, in the past, quite an obstacle to progress, especially to medical progress, but his days are numbered. The people are becoming better informed on these lines, and are beginning to suspect that it is not so much his love for them, but for his own advancement, that he has been led to sacrifice (?) himself on the public altar.

Greater advances in the interest of humanity will be made by medical science in the near future, in consequence of the better organization of the profession. The county, district, state and American medical associations being now placed on a new basis, can exert a greater influence in regard to legislation, and on all matters pertaining to the prevention of disease, the preservation of health and the prolongation of human life.

Some of the advances contemplated are of such general interest that they can only be secured through national legislation, such as the Pure Food Bill, which has recently passed the House of Representatives, and which we trust will become a law. Coupled with this should be established a department for the inspection and analysis of medicinal plants and pharmaceutical products, together with all secret nostrums and patent and proprietary preparations. Manufacturers of these latter compounds should be compelled, under the law, to label in plain language their preparations, giving the name and amount of every ingredient contained in them. Heavy penalties should be fixed for the adulteration of drugs or for misrepresentations in regard to the ingredients contained in a given compound. There should also be established some national system for the destruction of mosquitoes, now known to be the instruments in the propagation of malaria and yellow fever, and of rats, the carriers of the infection of bubonic plague.

Another subject of national importance is the study

of criminology. Whether criminals are born or made is a question of vast proportions. It is most probable that crime, like certain diseases, is to a degree hereditary, that is, the children are born with a tendency or predisposition toward the commission of crime, which tendency is most usually intensified by vicious environments.

It is estimated that in the United States there is spent annually on criminals eight hundred millions of dollars. Now if science, by the use of instruments of precision, aided by an aggregation of statistics, can demonstrate the mental characteristics, and the hereditary and other influences that go to swell the great army of criminals, there should be measures provided by the government to diminish criminal classes by correcting the vicious tendencies and environments by which they are propagated. For this purpose a bureau on criminal anthropology should be established and equipped by the United States Government.

Scientific investigation on this line, coupled with the knowledge we now have of heredity in the production of certain diseases, such as consumption, etc., would naturally lead to the consideration of marriage laws, prohibitory of matrimonial alliances of criminal and diseased classes. We do not at present argue in favor of or against such laws, but to be effectual they will of necessity have to be enacted by the United States Government. People are somewhat migratory in their habits, and should one state enact marriage laws, persons who wish to evade them could simply transfer their residence to another state in which such restrictions do not exist.

There should also be established by the Government a bureau of information from which literature could be distributed, demonstrating the causes and effects relative to the subjects herein indicated, on which the people need enlightenment.

We have thus mentioned some of the advancements of a national character, but for the most part medical legislation, under existing constitutions, comes under the head of what is known as the police regulations of the respective states, and hence are subjects of legislative enactment by the state.

There should be an effort on the part of all the states to secure a uniformity of laws relative to medical practice and also a system of reciprocity, so that a legally qualified practitioner in one state could remove into another and continue practice on properly certified credentials without being subjected to additional examination.

Science being the same everywhere, there is no reason why all sanitary regulations and laws relative to public health in the different states should not conform to a common standard.

In our own state the medical laws are reasonably good, but there are some changes that would be beneficial. The system of electing county health officers by the county courts is very unsatisfactory, and should be abolished on the ground that the courts are not competent to judge of the qualifications necessary for that position. The office of both county and city physician should be filled by appointment of the state board of health, on the recommendation of the county medical societies. All appointments of publich health officers should be made without regard to politics.

Section 3620 of the code of Tennessee makes it unlawful for any itinerant physician or vender of any drug, nostrum, ointment, or application of any kind intended for the treatment of diseases, to sell or apply the same, or for such itinerant physician or vender, by writing, printing or other methods to profess to treat or cure diseases or deformity by any drug, nostrum, manipulation or other expedient, the only exception to this law being that it does not apply to druggist or merchant. This on its face appears to be a good law, and was doubtless intended to prohibit the things indicated, but the state revenue laws nullify this important enactment by granting a license to a company or to an individual to publicly sell drugs, ointment, nostrums, etc. The state license or privilege is fixed at $1,000 per annum for the whole state, and in addition a county and municipal license, ranging from $15 to $40, according to the population. The purpose of the law is clearly intended to be prohibitory, its violation a misdemeanor, and the penalty a fine of from $100 to $400. But the state occupies the rather unique position of compromising itself by the enactment of a law positively forbidding a thing, and then for a consideration sanctions the violation of the law. In all reason and conscience this section of the medical-practice law should be stricken out entirely or amended, so as to prevent the state from issuing a license to persons to violate the law, or such person should be a legally qualified practitioner of medicine, indorsed by the state board of medical examiners (a thing which is not probable).

There is also in our state an exception of which we have a word to say. Under the medical-practice law a man is not allowed to write a prescription, pull a tooth, fill a prescription or cut off a limb until he shall have passed through the curriculum of a medical, dental or pharmacal college, or stood an examination before a board of examiners, and all this is right. But I have in mind a dame of uncertain age, unkempt hair, bad teeth, foul breath, long finger nails, sore eyes, dirty hands and faltering step, who never read a book on any branch of medicine nor perhaps any other book; she is full of superstition, born of ignorance; she does not believe in new-fangled ideas; she does not know the meaning of the word antiseptic, but claims to do her "docterin'" in the old way, yet she is the exception, made such by the legislature, and may take charge of that branch of medical practice, which every intelligent practitioner knows to be the one where positive knowledge and the most painstaking care are required, and which are so essential to the welfare of both mother and child. We certainly do not object to turning over this part of the practice to women, if they be required by the law to qualify themselves, but in the name of humanity we protest against anyone being allowed to endanger the life of mother and her innocent offspring through ignorance that breeds carelessness and criminal neglect. Therefore, we move striking out the exception.

But the time admonishes me that this paper, in length at least, is somewhat exhaustive. The rambling thoughts of this address have been gotten together in the brief intervals occurring during a busy season. Some of the ideas may seem to be crude or utopian, perhaps may contain a suspicion of criticism of certain existing conditions, but I beg to plead not guilty of views inclined toward asceticism, or in any degree pessimistic, for I am firmly possessed of the belief in scientific progress on all lines, especially in the allied sciences of humanity and medicine, and look forward to the good time coming when it shall not be said: "God and the doctor we

adore, when sickness comes, not before. When we get well, both are alike requited; God is forgotten, and the doctor alighted." But a period in the near future shall mark the triumph of science over darkness and superstition, and the physician no longer be summoned only in emergencies to apply his art to the cure of maladies produced by a disregard of the laws of health, but he shall be an officer of state, clothed with honor and authority and salaried by the government. His mission shall be as an apostle of the goddess Hygeia to teach the people the science of health—the art of keeping well. Under his genial administration crime and disease shall be the exception, peace and health rule. Healthy parents shall behold with pride the rosy cheeks of their children, which, like olive plants, shall grow up and become fruitful. National prosperity and happiness shall be the result of a symmetrical manhood and womanhood endowed with physical strength and beauty, mental excellence and moral rectitude. Mankind shall not be hurriedly summoned from the stage of the world's drama in the innocence of childhood, the bloom of youth or the busy activities of middle life, but in a green old age at the nightfall of life, willingly yield to the influences of a gentle and peaceful euthanasia.

Original Articles.

ACUTE ASCENDING PARALYSIS AND LANDRY'S PARALYSIS.

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At the present time there is much confusion of thought, and not a little conflict of statement, as to exactly what is meant by Landry's paralysis and as to the true nature of the disease. Landry's paralysis and acute ascending paralysis are by no means always the same, and yet the terms are used synonymously. There must be a middle ground whereon they overlap to warrant this synonymous use of the two names. A clear conception of the nature of this middle ground, from both the clinical and pathologic points of view, will not only go far toward explaining the dissimilar cases lying outside of it and on either hand, but it will help to accomplish what is of far more practical importance, for it will afford greater unity, definiteness and coherency in the treatment of all cases. The purpose of this paper is to clear up a little, if possible, the confusion still surrounding the present conception of acute ascending paralysis. The following propositions, resting on clinical and laboratory observations, will be discussed, and in the end certain definite, practical conclusions will be attempted:

(*a*) Landry himself described not a new disease—not even *a* disease—but rather a symptom-complex or clinical picture, which included much less than what is now included under the term acute ascending paralysis.

(*b*) Both Landry's disease and acute ascending paralysis are recognized to-day as mere phases of a particular form of specific intoxication of the nervous system.

(*c*) The proof that this intoxication is of bacterial origin, the particular micro-organism, if, indeed, there is a particular one being still unknown, is about established.

(*d*) This bacterial intoxication produces functional disturbances, and later on diffuse inflammatory and degenerative changes in various parts of the central and peripheral nervous apparatus, thus accounting for the variability of the clinical phenomena.

(*e*) Time, virulence of the poison and resistive power of the patient are the principal factors that determine the nature of the pathologic findings and the clinical form of the trouble. Under some circumstances the post-mortem findings may be *nil*, while under other circumstances they may be highly suggestive of a diffuse myelitis, an acute anterior poliomyelitis or a peripheral multiple neuritis. It is an error, therefore, to identify Landry's paralysis, or even acute ascending paralysis, always with one or the other of these diseases.

(*f*) The recognition of the class of cases under discussion, as a form of diffuse bacterial intoxication, not only explains most satisfactorily their striking clinical discrepancies, but suggests a far more rational guide for their management than has any explanation hitherto offered.

If we are to limit the definition of Landry's paralysis to what Landry himself described in 1859, we must narrow it to an acute ascending paralysis, flaccid in character, rapid in progress, without disturbance of the reflexes, without muscular atrophy or electrical changes, without sensory phenomena and without implication of the vesical and rectal functions; usually fatal in a few days with respiratory involvement; and devoid of all discoverable postmortem pathologic changes. Such a definition, however, is not comprehensive enough to include the modern conception of acute ascending paralysis. Cases are on record wherein the paralysis was not of the regularly ascending type, but had descended and even skipped about from arm to leg and from side to side. In these cases, moreover, sensory symptoms appeared early; typical muscular atrophy was present; and there were well-recognised alterations in the electrical responses.

Not a few of the cases recovered. Among those that were fatal, postmortem examinations, made in accordance with the more delicate modern methods, revealed distinct inflammatory hemorrhagic and degenerative lesions. Thus, from both the clinical and pathologic points of view, the description of acute ascending paralysis has to be drawn on much more extensive lines than those adopted by Landry and his immediate followers. As we proceed with our discussion, it will be seen that Landry described merely a symptom-complex or group of cases that form a part of a much more distinct and comprehensive group.

Among the first to break entirely away from Landry's narrow conception of the disease were Taylor and Clark, who, in 1900, wrote: "On the basis of an acute, clinical and necessarily highly superficial pathologic observation made many years ago by Landry, subsequent observers, led largely by a name, have been attempting to force into the narrow clinical conception outlined by Landry, various symptoms, none of them fundamental and supported by no constant pathologic findings and still less by a definite etiology. The so-called disease has, with each new investigation, lost something of its coherence. We have persistently clung to a name, and demanded that symptoms which it represented should conform to our preconceived idea." These words voice the opinion of Dejérine, Schwab, Schmaus, Diller and others. To separate such groups of cases as Landry described and give them the name of a distinct disease, is

an arbitrary, useless and confusing procedure. It belongs to that sort of ultra-refining classification which makes a special disease, ataxic paraplegia, for instance, of a mere combination of lateral and posterior sclerotic degeneration, or enumerates a half dozen or more types of chorea out of a mere symptomatic form of muscular movement.

It is much more rational and practical to regard all of the groups of acute ascending paralysis as merely particular manifestations of a diffuse, specific intoxication, which intoxication is rendered more or less variable by such factors as the duration of exposure, the virulence of the poison and the particular susceptibility of the patient; and which, therefore, reveals itself in one or other of the clinical types of the disease described above. The one point in which these various types of acute ascending paralysis all seem to agree, and which justifies, probably, the recognition of it as a more or less distinct disease, is its apparent limitation to the lower or peripheral neurons. If perchance some day a specific microorganism should be discovered as the cause and the *only* cause of Landry's paralysis, the ground for considering the latter as a distinct and uniform disease would be quite unassailable. At present no such ground exists.

Let us now consider a little more in detail the modern clinical picture of acute ascending paralysis, so as to discover, if possible, its likeness and unlikeness to other well-known forms of disease, such as multiple neuritis, acute anterior poliomyelitis, acute meningomyelitis or acute ascending myelitis. With Landry we agree that there is a group of cases in which there is a rapidly ascending paralysis, motor in type, flaccid in character, beginning usually in the lower extremities and then passing to the upper limbs, and finally causing death by involvement of the bulbar functions, especially respiration. In its upward, rapid course this paralysis creeps, as it were, from the feet to the neck. Even the muscles of the trunk and throat do not escape. Deglutition and articulation are affected, Cheyne-Stokes breathing is frequently present, and asphyxia with diaphragmatic paralysis usually closes the scene. So swift and profound is the disease that it is almost appalling at times. I have seen it terminate in death a few hours after its first manifestation. Generally it lingers a few days, death occurring, as a rule, within a week. In the exceptionally rapid cases the reflexes may be found as yet undisturbed. In the larger number, however, there is more or less loss of the deep and superficial reflexes. Only in a few prolonged cases do muscular atrophy and abnormal electrical reactions appear. The bladder and rectal functions remain normal. Sensation is rarely, if ever, disturbed. The mind continues clear. Often in the beginning there is a slight elevation of temperature, but this quickly subsides and remains at normal. This peculiar elevation of temperature, with hyperidrosis, mild delirium and other signs of a general septic infection, appears rather frequently in the more recent reports. Postmortem examinations reveal no lesions inside or outside of the nervous system, no changes of any sort, except the rather frequent enlargement of the spleen. Such, in brief, is the modern typical Landry's paralysis. It is the definition of Leyden, approved by Thomas, that is accepted nowadays.

From this type, however, we recognize many divergent forms. For instance, Mills and Spiller, after adopting the definition of Leyden, admit a descending type of the disease in which paresthesia, without severe or persistent pain, is a prominent symptom. Clinically, the picture of Landry's paralysis undergoes some most noteworthy and suggestive changes, especially in those cases that have escaped a fatal issue, and that gradually subside after a comparatively long period of duration. Moreover, these prolonged cases, when they do die, reveal at the autopsy some very striking and suggestive pathologic changes.

The modern clinical divergent types of the disease are to be found anywhere within the extremes of a multiple neuritis on the one hand, and an acute anterior poliomyelitis on the other. So completely, indeed, have we faced about, that Diller, in his exhaustive study of Landry's paralysis, now assigns the first position, both in regard to time and importance, to the sensory symptoms.

Including these divergent forms of the disease, then, Landry's paralysis, in the most modern sense, must conform to the following conception:

It does not always regularly ascend. It skips about. Occasionally it appears first in one leg and then in the opposite arm, to continue in the other leg and finally in the other arm. One leg and both arms, or both legs and one arm, may represent its distribution. Fagge states that the great naturalist, Cuvier, succumbed in a few days to an acute descending paralysis which bore all the signs of Landry's disease; while Oppenheim reports a case in which only bulbar symptoms were present. Rowden's case was of the descending type, and in Howard's case bulbar symptoms showed themselves first, and then in order involvement of the following muscles: hip, thigh, shoulders, arms, legs, hands, feet, lips and diaphragm. I recently saw a case in which bulbar symptoms appeared early, but diminished as the paralysis attacked other muscles of the body. The cranial nerves are sometimes involved, as shown by the facial paralysis, diplopia and paralysis of accommodation, all of which have been reported as a part of the picture of Landry's disease.

A certain degree of muscular atrophy has been observed in some cases, so much so that they quite resembled an extensive form of acute anterior poliomyelitis. The electrical reactions have also been seen to undergo the well-known changes characteristic of degeneration in the lower motor neurons. In Burghart's case, quoted by Knapp and Thomas, there were typical electrical reactions of degeneration. In a case of Oppenheim's, the nerves and muscles reacted to weak electrical stimulation, but an increase in the current strength did not increase the intensity of the contractions. Even the strongest current failed to secure a pronounced contraction. Curiously enough, on several occasions, a strong current produced no contraction at all or a weaker one than that evoked by a weaker current. Oppenheim says that a piece of the muscle showing these peculiar electrical phenomena revealed on examination a waxy-like degeneration. The symptoms disappeared with the recovery of the patient.

So far as I know, very few cases have been observed or reported in which the sphincters were involved. Oppenheim, however, is authority for the statement that complete sphincter paralysis does occur. In Goebel's case the vesical sphincter was weak, and late in the disease there was diminished sensation. Sphincter troubles were noted in Knapp and Thomas' three cases.

More remarkable than all this is the frequent association in the modern cases of Landry's paralysis of pronounced sensory with the motor phenomena. The sen-

sory disturbances have been of every variety, but chiefly in the pain, temperature and touch spheres. From hyperesthesia to anesthesia, hyperalgesia to analgesia, all along the line of the various paresthesiæ, have the sensory manifestations been observed. These cases have been reported by such competent observers as Robinson, Taylor and Clark, Mills and Spiller, Worcester, Marie and Marinesco, Hirtz and Lesné, Oettinger and Marinesco, Diller and others. Early sensory symptoms, in some cases before the onset of the paralysis even, have been seen in cases reported by Schwab, Wappenschmidt, Griffith, Kapper, Maxwell, Stockton, Diller and others. In the words of Diller: "In the symptomatology of Landry's paralysis, sensory symptoms are almost constantly present and generally precede the motor paralysis by several hours or a day, occasionally by much longer periods." Pains are found in many of the cases. They are of the nature of local tenderness and neuralgic pains, and in this respect are highly suggestive of peripheral neuritis. They are elicited by pressure on the muscles and nerves and by passive movement. Though frequently complained of, these pains after all are, as a rule, absent even in modern Landry's paralysis. A complete loss of sensation is so rare that anesthesia falls short of being an important symptom. Fugitive and variable paresthesiæ are occasionally noted. After all, it is true, as Oppenheim says, that, as a rule, gross sensory disturbances are absent in Landry's disease. When they are present it is at times practically impossible to differentiate the case from one of polyneuritis. And yet it is a mistake, as I will endeavor to show later on, to identify Landry's paralysis with peripheral multiple neuritis, as Ross and his followers have done, and to declare that they are one and the same disease.

In summing up, then, as Buzzard so well does, the clinical conception of modern Landry's paralysis, we may classify the cases under three heads. The first class includes those that are marked by motor palsy, absent reflexes, absent electrical changes, slight paresthesiæ and absence of muscular atrophy. These are the cases in which no postmortem findings can be demonstrated by the use of osmic acid and the Nissl method. In the second group of cases there are more advanced motor and sensory symptoms, some slight electrical reactions and trophic phenomena. In these cases there is in all probability a degeneration of the motor and sensory neurons, with beginning chromatolytic changes in certain ganglion cells. In the third class of cases are to be placed those that exhibit still more pronounced motor and sensory symptoms, sphincter disturbances, typical muscular atrophy and electrical changes. These cases are probably characterized by advanced changes in both the neuron bodies and their processes.

A careful study of the pathology and pathogenesis of acute ascending paralysis, so far as we have data at the present day for such a study, leads almost conclusively to the opinion that the trouble is merely a manifestation of a profound form of toxemia, in which the toxin expends its force chiefly on the lower neurons. In the earlier descriptions of Landry's paralysis, there were no postmortem findings. Westphal confirmed this, and both he and Landry, therefore, adopted the toxemic theory of the disease. Others who have failed likewise to find any postmortem changes in the nervous system include such careful investigators as Kahler, Pick, Greppin, Ranvier, Vulpain, Bernhardt, Dejérine and Goetz, and Hun. It may be that in some of these cases the early and faulty technic should be blamed for the inability of the examiners to find any pathologic alterations, while in others the lack of thoroughness in the examination must bear the responsibility. For instance, in one of Westphal's cases, only the cervical part of the cord was examined. As later observations seem to show that both the cervical and lumbar parts of the cord are equally important centers of attack, it is possible that changes might have been discovered in the lumbar region. Again, it is not improbable that in long-running cases, such as another of Westphal's, the lesions may have disappeared and the exudates have been absorbed before death finally took place. All of this may reduce the number of cases with negative findings. Nevertheless, it must be admitted that cases do come to the autopsy that do not reveal the slightest sort of pathologic change. The more recent reports of Ormerod and Prince and of Giraudeau and Levi confirm this. The number of such cases, under the more accurate and painstaking methods of modern times and the use of the osmic and Nissl staining technic, has been gradually decreasing, until now they constitute quite a small minority. It may well be imagined that in these minority cases the virulence of the poison or the special susceptibility of the patient brought about the fatal termination before any histopathologic changes were possible.

Landry, Westphal and the other early investigators were supported in their belief that acute ascending paralysis was due to a profound toxemia by the frequency with which they found on postmortem examination enlargement of the spleen, old hemorrhagic remains in the lungs and bowels, inflammation of the lymph glands and occasionally albuminuria. Gowers long ago made the shrewd suggestion that the not infrequent paralysis of accommodation seen in cases of Landry's disease confirms its toxic origin, because the isolated acute paralysis of a functional center, not anatomically separate from others, is known to be caused only by a toxic influence. The more recent work of special observers has almost absolutely established the toxic origin of the disease. For instance, Baumgarten found that in all probability anthrax was present in a case seen by him. The bacilli were discovered in the blood and tissues. In a case reported by Curschmann, though there were no clinical manifestations of typhoid fever, the characteristic intestinal lesions were present, and pure cultures were obtained from the typhoid bacilli discovered in the spinal cord. Bacilli were seen by Centanni in the endoneural lymph spaces of a case in which there was an interstitial neuritis. According to Eisenlohr, there were found in some cases various kinds of bacilli in the central nervous system, especially staphylococci. This author is inclined to attribute Landry's disease to a mixed infection. He does not believe that the microorganisms are necessarily constant. Indeed, they may be entirely absent or the spinal cord alone may be affected by them. Among the other micro-organisms that have been found in different cases may be mentioned the *Streptococcus longus* by Remmlinger, a diplococcus by Marinesco, the anthrax bacillus, or one much like it, by Marinesco and Marie, and the so-called Fraenkel-Weichselbaum bacterium by Seits. Bacteria have also been discovered by Burghardt, Friedlander and Giese, Mouravieff and Montourine. Oettinger and Marinesco and others. Even more direct evidence than all this of the bacterial origin of the disease has been furnished by the cases of Courmont and Bonne, Piccinino, Roger and Josué and others. Very recently Buzzard detailed

a typical case of Gowers, in which he discovered a diplococcus from which pure cultures were made, and from the injection of which into rabbits he obtained in these animals a symptom-complex identical with Landry's paralysis. As this micro-organism was found in the dura mater, Buzzard suggests that it be called the *Diplococcus thecalis*. He says that it does not conform with any previously discovered organism. In addition to Buzzard, Thoinot and Maselli have produced in animals the typical clinical picture of Landry's paralysis by the injection of micro-organisms into the blood and spinal cord (Oppenheim).

Whether the relationship is etiologic or not, it is a most suggestive fact that Landry's paralysis has been seen to develop after malaria, diphtheria, typhoid, variola, anthrax, influenza, pneumonia, pertussis, septicemia, gonorrhea and the puerperium. Once it occurred after the Pasteur treatment for rabies, and sometimes it has been attributed to syphilis and alcohol.

In a considerable number of cases, diagnosed as Landry's paralysis, changes were found in the peripheral nerves indicative of an interstitial and parenchymatous neuritis. Since Ross' exhaustive and valuable study of multiple neuritis, wherein he classifies Landry's disease as a form of polyneuritis, many have adopted the view that acute ascending paralysis of the Landry type is but a phase or manifestation of peripheral multiple neuritis. Ross based his conclusions, which in the main agree with those of Nauwerck and Barth, on a tabulated series of 93 cases. Among those who follow the teachings of Ross may be mentioned Dejérine and Goetz, Klumpke, Centanni, Kirilsew and Mamurowsky, Dydynski, Krewer, Walton, Putnam and others.

In another group of cases evidences of the disease were found only in the spinal nerve roots; and according to Buzzard, such changes are more frequent in the anterior than in the posterior roots. Oppenheim records that in one case merely a degeneration of the anterior roots was discovered. In Hun's case the results of the autopsy were negative, except for a slight cerebral and spinal meningitis and a degenerative neuritis of some of the fibers of the anterior roots of the cauda equina. Cultures were made, but no bacteria were found.

A third class of cases were characterized especially by spinal-cord involvement. Such cases have been reported by Eisenlohr, Schultze, Ketli, Hlava, Immerman and others. Disseminated foci of inflammation, exudates and capillary hemorrhages in the medulla and cord, swelling of the axis cylinders in the white matter of the anterolateral tracts, poliomyelitic remains, etc., have been the usual findings. Iwanow's two cases were highly instructive. The cervical and lumbar enlargements showed a concentration of the disease process, and at these points it was more or less limited to the central canal with extension into the anterior horns. It consisted of an exudation of lymphoid bodies, fibrinous exudates around the vessels and nerve fibers, the result of an inflammation, disintegration of the axons, swelling and indistinctness of the neuron bodies. An edema surrounded the vessels. The nerve roots and meninges were normal; bacteria were absent. The cases of Eisenlohr and Krewer showed both neuritic and myelitic processes. In Kirilsew and Mamurowsky's case there was marked acute primary parenchymatous neuritis of the nerves of the feet, legs and forearms, and to a lesser degree of the roots of the cervical and lumbar enlargements. The cord itself was hyperemic, with cloudiness of the gray substance, slight atrophy of the anterior ganglion cells and an accumulation of cortical cells in and about the central canal. Clark has described a fluid exudation about the central canal on a level with the lumbar nerves. Baumgarten, Eisenlohr and others have noted similar findings. In Kleb's case there was pericardial tuberculosis and widely distributed hyaline thrombi in the branches of the central artery of the cord. They were most numerous in the lumbar region. Secondary phenomena were minute hemorrhages and exudations, especially in the ganglion cells. The peripheral nerves were intact. The thrombi were probably of toxic origin. From the symptoms of a case which ultimately recovered, Sanger Brown believed that the chief disturbance was in the lumbar and cervical enlargements. The reflexes were exaggerated and there was an ataxic paraplegia. Touch and temperature sense were diminished somewhat. Carter's case, which also recovered, exhibited a similar picture. Both of these cases bore a singular resemblance to syringomyelia, with implication of the tissues immediately surrounding the central canal. In nearly all of these myelitic cases, a predilection is shown by the disease process for the immediate neighborhood of the central canal in the cervical and lumbar enlargements.

Finally, a fourth class of cases has been reported, in which all parts of the lower motor neuron, peripheral nerve, spinal root and ganglion cell were involved in a scattered and diffuse pathologic process. In a rapidly fatal case, Spiller found changes in the peripheral nerves and similar alterations in the cell bodies of the anterior cornua. Thomas has reported two cases with similar findings. In fact, Spiller, Mills and Osler all define Landry's disease as an acute poisoning of the lowor motor neuron.

With all this pathologic evidence in hand, one can not escape the conclusion of Buzzard that Landry's paralysis, in the modern sense, is the result of "a local infection, a general pyemia, or lastly and most frequently of an acute intoxication"; and that, in the words of Taylor and Clark, it exhibits "no essential constancy in the clinical symptoms nor in the pathologic findings and the etiology is wholly vague."

In view of this widely varied picture of the clinical and pathologic presentations of so-called Landry's paralysis, the exact meaning of the name and the advisability of its retention both press for answer. It is the steady aim of science to simplify and generalize, as far as known data will warrant, all knowledge. At one time the term Landry's paralysis seems to have stood for a certain definite clinical entity; now it is applied to conditions as unlike those originally classified under it as day is unlike night. In behalf of scientific accuracy, one of the following reforms is imperatively demanded; the term itself should be irrevocably dropped, or a new and greatly expanded conception of its meaning should be adopted, or the symptom-complex which it represents should frankly be recognized and so treated in the text-books as one of the many possible phases of a particular, well-known disease process. There are advocates for all three ways out of the difficulty. Personally, I incline to the third or last way.

Diller suggests that the name Landry's paralysis, defective as it is, to define our modern conception of the trouble, is nevertheless convenient for practical purposes, much as the term apoplexy is which, in itself, means nothing, but yet covers a certain set of clinical phenomena that may be caused by a number of more or less obscure pathologic changes. If the term

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Landry's paralysis were only as indefinite as the term apoplexy, Diller's suggestion might be commended, but unfortunately the term Landry's paralysis does stand for a distinct, well-marked clinical picture, and therefore can not justly be made to cover all the varied groups of cases that it is made to cover to-day. Furthermore, it is a question whether the art and science of medicine are not greatly hampered by the retention of names for the mere sake of practical convenience, when those names are so positively misleading as the name Landry's paralysis is when applied to some of the grossly divergent forms of the trouble reported nowadays.

The suggestion of Diller virtually amounts to an absolute denial of such a disease as Landry's paralysis, in which denial most of us will probably acquiesce. The distinct clinical manifestation, however, described by Landry in 1859 and since known by his name, can not be denied. It is a clearly defined entity, whose relationship to some more extensive disease process we may later on discover, but whose name we can not justly or wisely apply to manifestations which Landry, perhaps, never dreamed of when describing his particular symptom-complex.

Those who still cling to the name, recognizing the definiteness of the clinical picture which it was originally made to cover and who are loath to give it up for any reason whatsoever, adopt a curious mode of scientific logic. They eliminate from consideration all reported cases that do not absolutely conform to Landry's original description. Some very recent writers, notably Goebel, have adopted this procedure, while Bailey and Ewing, in 1896, rejected from their 75 collected cases, 31; namely, the cases of Bernhardt, Pitres and Vaillard, Hayem, Pribytkow and Brochain, because there were marked sensory phenomena present; the cases of Vierordt, Strümpell, Eichhorst, Diller and Meyer, because their course was chronic or prolonged; and the case of Roth, because it was not ascending in type. As a collection of cases strictly illustrating what Landry meant by his paralysis, the retained list of Bailey and Ewing is a happy hit; but such a method of classification, it seems to me, is of no value whatever, unless it can be clearly shown that the rejected cases were absolutely unrelated, clinically as well as pathologically, to those of the retained list. In other words, any man may describe any sort of a symptom-complex, and the chances are ten to one that a tolerably good list of cases that will correspond may be gathered together. The real question is not as to the number of cases that correspond merely with Landry's definition, but as to the reliability of Landry's description as a definition of a unique and distinct disease, and of the relationship of it, if any, to more extensive disease processes or of the divergent, rejected cases to it.

Viewing the question from all sides, then, the following conclusion may be accepted as fairly representative of the modern conception of Landry's paralysis and its relationships. There is a form of nervous intoxication, whether specific or not unknown, in which the lower motor neuron is selected to bear the brunt of the trouble. The character and distribution of the lesion in this lower motor neuron and its associated structures, together with the consequent clinical picture produced by that lesion, are dependent on many factors, chief of which are the virulence of the poison, the duration of the disease and the individual susceptibility of the patient. One phase of this intoxication is covered by the definition of Landry; other phases are the symptom-complexes that closely resemble multiple neuritis, acute anterior poliomyelitis and acute ascending meningomyelitis.

This being so, it is worth while considering for a moment the differential diagnosis between this intoxication and the well-recognized forms of disease which it so often closely resembles.

If we believe, with Ross, Raymond and others, that a multiple neuritis is the pathologic basis of all these cases of acute ascending paralysis, we must either enlarge our symptomatology of multiple neuritis or contract that of the class of cases now under consideration. Without doubt there are cases so near to the borderline between the two classes of disease that a differential diagnosis is absolutely impossible. Such cases are not numerous enough, however, to afford ground for the belief that acute ascending paralysis is always a multiple neuritis, or to render a differential diagnosis a matter of useless effort. Multiple neuritis is something quite distinct, both pathologically and clinically, from the forms of neurotic intoxication included under the generic term acute ascending paralysis. In multiple neuritis the regular appearance early in the disease of sensory symptoms, usually before the motor manifestations, the paraplegic and more or less symmetrical distribution of the paralysis, the ataxia and other special motor phenomena, the electrical changes, the loss of the deep reflexes, the rapid muscular atrophy, the delirium and other mental accompaniments, and finally the slower course of the disease process and the more favorable prognosis are sufficient to discriminate multiple neuritis clinically. Pathologically the less generally diffuse or focal character of the lesions, the comparative absence of lesions outside of the nervous system, and the comparatively less involvement of the cerebrospinal axis proper with these scattered diffuse lesions are characteristics of polyneuritis. In this disease, moreover, there is decidedly more fever, and the bulbar symptoms are not so obtrusive. The paralysis is not so regularly of the ascending type. The age of the patient and the presence of an alcoholic history are also matters for careful consideration.

From acute anterior poliomyelitis and the various forms of acute ascending myelitis, the differentiation is still less difficult if one keeps well in mind the specially prominent characteristics of acute ascending paralysis. These are the rapidly advancing motor character of the paralysis, the comparative sensory phenomena, the unaltered electrical reactions, the absence of typical muscular atrophy, the non-involvement of the sphincters and the almost total want of fever and febrile manifestations. In infantile palsy the average age of the patient and the peculiarly localized muscular distribution of the paralysis are important aids in making a differentiation. The sensory phenomena, the involvement of the sphincters and the reflex changes distinguish quite clearly an ascending myelitis.

The frank recognition of the toxemic origin and nature of both the typical and atypical forms of Landry's paralysis, will make the way clearer for a rational mode of treatment. The two prime indications are to support the patient's vitality and to eliminate the poison as quickly as possible. For the former purpose, judicious stimulation is demanded. Alcohol, strychnia and the more diffusible stimulants may be cautiously used. For the latter purpose the skin, bowels and kidneys should be aroused into unusual activity. Diaphoresis,

provoked by the use of the hot pack, catharsis with calomel or other rapidly acting and non-exhausting purge, and diuresis with diuretin or some similar agent are all to be employed as promptly as possible. The few remedies that have been tried and recommended in this disease can not be very highly lauded. They have been tried in far too small a number of cases or else they have been given on too much of a mere empirical basis. Such remedies, however, are the salicylates, benzoate of sodium and large doses of ergotin (gr. ii every hour). As might have been expected, mercury and the iodid of potassium have been experimented with. With a history of syphilis, they are, of course, indicated. Soltman reported a case in a 11-year-old girl cured by vigorous inunctions. Less desirable, if not positively irrational, would seem to be such violent measures as strong counter-irritation to the spine with mustard and the actual cautery. Such have been tried, however, and found wanting. Special symptoms, such as the dysphagia, for instance, call for special measures, such as the rectal or nasal tube. In fine, the treatment of Landry's form of intoxication of the nervous system narrows itself down to careful stimulation, rapid, non-exhausting elimination and increased nutrition with absolute rest in bed for a more or less prolonged period.

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SURGERY OF THE STOMACH.*

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We have learned from recent surgery of the upper abdominal cavity that in very many cases diagnosed chronic dyspepsia, and treated hygienically, dietetically and medicinally without permanent relief, the symptoms are not the result of functional trouble or of chronic gastritis that changes the chemistry of the gastric secretions, but are the result of pathologic conditions that interfere with the normal physics of the stomach and duodenum, because of organic and mechanical changes in these organs, caused by gastric or duodenal ulcer, with frequent perigastric inflammation, adhesions and contractions, which predispose to the development of cancer.

While our learned pathologists, in necropsies of patients dying in the large hospitals of the world, tell us that about 5 per cent. have active gastric ulcer, or the scar of an old one, and that in 50 per cent. of these there are perigastric adhesions, that from 1 per cent. to 3.5 per cent. of all deaths are caused by gastric cancer, and that approximately 40 per cent. of all cancers occur in the stomach, they are silent when we inquire, how are we to prevent this intense suffering and these untimely deaths?

It seems that this has been left to the combined surgical pathologist and clinician, who has learned more from *sectio in vivo* than from necropsies. He has learned, by timely operation for gastric ulcer and perforation, pyloric retention and obstruction, and perigastric adhesions, that he may not only cure his patient of gastric hemorrhage, perforation, intense pain and dyspepsia, but may prevent the development of cancer of the stomach, to which these irritations, by interfering with nutrition and resistance, predispose. Notwithstanding these facts, the life-saving principle of early diagnosis of organic lesions and timely surgical interference is not generally appreciated by most of our good surgeons and physicians, the work in its excellence being mainly confined to but comparatively few men (Robson, Mayo, Murphy, Ochsner, Mikulicz, Czerny, Moynihan, etc.), and even with those who are doing most to evolve what is in the interest of the immediate relief and subsequent life of the patient, there is no consensus of opinion in all instances as to when an operation should be performed, or which of the many operations devised accomplishes the most satisfactory results.

Professor von Mikulicz operates on about four times as many cases of cancer of the stomach as he does of gastric ulcer, while the reverse is practically true of Dr. Mayo; hence von Mikulicz takes this as the measure of the relative number of benign and malignant diseases of the stomach in Germany and the United States. In view of the fact that about 5 per cent. of all necropsies show active gastric ulcer, or the scar of an old one, while in the Vienna Hospital in 61,287 necropsies gastric cancer was found in but 1.5 per cent., I am inclined to the opinion that von Mikulicz's operations are not always timely, cancer having developed in an ulcer or about its cicatrix, for the cancer is usually the subsequent change in the ulcer.

Experience in gastric surgery, when the profession practically appreciates the significance of early diagnosis and timely operation, will convince us that in all countries there is about the same relative ratio in the number of cases of gastric ulcer and gastric cancer. Dr. Mayo diagnoses his cases and operates in the pre-cancerous stage, while von Mikulicz often loses the golden opportunity and operates after cancerous invasion; hence his immediate and subsequent mortality is much greater than in Mayo's cases.

Gastric and duodenal ulcer, with the numerous and varied complications, will finally sustain the same comparative relation to the surgeon and physician that appendicitis does to-day, and the same benefits will be derived from early diagnosis and timely operation. Only a few years ago, most patients with appendicitis refused to be operated on, having been told by many of our physicians and surgeons that the disease could be cured by saline purgation, opium and hot or cold applications. The reverse is true now, and in the near future the same will apply with equal emphasis to surgery of the stomach.

While gastric ulcer and cancer may occur in any part of the stomach, they are usually found in the pylorus, where there is an abundance of lymph vessels and glands, the cancer succeeding the ulcer, though often it does not do so for several years, many cases of ulcer being apparently cured. In the upper or lesser curvature of the stomach the lymph spaces and glands are abundant, and extend through the base of the gastrohepatic omentum and in the stomach tissue to the cardia, with the current from right to left, but in the lower or greater curvature, the lymphatics do not extend far to the left through the gastrocolic omentum, and the current is probably toward the pylorus, as seems to have been demonstrated by Cuneo. It is important that we should know, in pylorectomy and partial gastroectomy, how much of the stomach and the omenta to remove to destroy the cancer-bearing areas and infected lymphatics, except the isolated area of lymphatics in the dome above the gastro-

* Read before the Louisville Clinical Society.

splenic ligament; for the exact line of separation between gastric ulcer, with infiltrated or scar tissue, and cancer can never be positively known.

Until recently and even now, with few exceptions, nearly all chronic diseases of the stomach and upper abdominal cavity have been treated empirically by giving such medicinal, dietetic and hygienic treatment as the subjective symptoms seemed to indicate, occasionally analyzing the stomach secretions so as to supply any absent chemical constituent. Hence the frequent organic lesions that yield only to surgery were not diagnosed until advanced cancerous development, or until the disease had progressed too far to be cured by either the physician or the surgeon; and as we daily see in our mortuary reports, these patients fill an untimely grave. In the diagnosis of disease of the stomach, analyses of its contents are never conclusive until we have a correct appreciation of the value of the subjective and physical symptoms, caused by organic lesions and mechanical changes, both gastric and perigastric, including diseases of the gall bladder, bile ducts, duodenum and pancreas. We must learn to make a pathologic and surgical diagnosis, such as we are now able to do in diseases of the fallopian tubes and other pelvic structures, and the appendix; and this the abdominal surgeons will very soon teach us. The excellence of the work in pelvic surgery made possible the grand achievements of surgery in the lower abdominal cavity, including diseases of the appendix, and the perfection of this work has extended to and is perfecting the surgery of the upper abdominal cavity. From the pelvis we have gone to the appendix and to the intestines, kidneys and ureters, then to the gall bladder and bile ducts; and now we have reached the stomach and the pancreas with more encouraging results than when we approached the other organs and structures.

While a knowledge of the pathologic changes in any disease is necessary to enable us to obtain the best results in the surgical treatment, time will not permit me to enter into an extended discussion of the symptoms and physical changes that indicate the necessity for a surgical operation in diseases of the stomach, so I will briefly mention but a few facts that may enable us to make an approximately correct diagnosis, and to judge of the necessity for surgical interference.

In acute ulcer, hemorrhage or repeated hemorrhage may occur with or without premonition, sometimes causing profound shock and alarming symptoms, from which the patient usually quickly recovers without medical or surgical aid. The blood is vomited and also passed through the bowels in the feces, which confirms the diagnosis. The hemorrhage may continue in diminished quantity and frequency, and the ulcer assume the chronic form; it may then entirely cease or become profuse and quickly fatal by the necrosis of a large gastric or perigastric artery. Gastric perforation may occur in the acute, subacute or the chronic ulcer. If in the acute ulcer the perforation is sudden, of large size, allowing the stomach contents to pass freely into the peritoneal cavity, causing profound shock and intense pain, with board-like rigidity of the recti muscles, such as we have in acute appendicitis; even when the pain and shock are relieved by morphia, the rigidity of the muscles remains. We may have similar symptoms in duodenal perforation, gall-bladder rupture or acute pancreatitis, but a differential diagnosis is not essential, for in either instance a surgical exploration should be promptly instituted. Perforation in the subacute ulcer may show more premonitory symptoms, or may penetrate the walls as quickly, but as the opening is small, inflammatory exudation and plugging usually prevent the extravasation of stomach contents, and very soon the opening is closed by firm adhesions, often leaving the stomach in a permanently crippled condition, such as we find in most cases of chronic gastric ulcer. A rupture through the posterior wall may not be followed by extravasation of the stomach contents, because the anatomic conditions admit of quick adhesions, the peritoneal surfaces being in apposition, but in these cases we may have subphrenic abscess. We have retention in chronic gastric ulcer, because the circular fibers of the pylorus spasmodically contract, when pain is induced by the efforts of the stomach to force the food into the duodeum; or because of organic changes that contract the opening at the gastroduodenal union; or because of cicatricial contraction in the body of the stomach, or perigastric adhesions that interfere with its normal motility. In either of these conditions the stomach will probably become dilated and may be hypertrophied, caused by the greatly increased labor entailed on it.

Pain will be a frequent symptom. The macerated food that the stomach can not force into the duodenum will decompose and cause painful irritation, and vomiting often results because of reversed peristalsis, such as we find in any part of the alimentary canal when an obstruction is not overcome by the normal peristaltic force. A stomach that at all times contains residual food in a decomposed condition can not be restored to its normal function except by a surgical operation that will cause free drainage. The diagnosis may be made positive by giving the patient no food for many hours, and then removing the stomach contents through a tube. If there is no interference with drainage, the stomach will be empty, otherwise there will be retained decomposed and bad-smelling residuum. Dilatation of the stomach and hourglass contraction may be outlined, and a correct diagnosis made by inflating the cavity with air pumped gradually in through a bulb syringe watching the changes that occur as the stomach is distended; and well-developed single or multiple hourglass contraction with pyloric stenosis may also be diagnosed by filling the stomach with water and then removing it. If 30 ounces be used, probably not more than from 20 to 25 ounces will come away through the tube, the other being left in the pyloric saculus; or if the stomach be thoroughly cleansed by lavage, and within thirty minutes the tube be again introduced, there will be an offensive discharge which had returned to the cardiac saculus from the pyloric end. While an excess of hydrochloric acid in the gastric secretions may be the cause of gastric ulcer, and while the hydrochloric acid may be diminished or absent in cases of cancer of the stomach, hyperchlorhydria and hypochlorhydria are of secondary importance as diagnostic factors.

In cancer of the stomach, chemical and microscopic examinations of stomach contents, of feces, urine and blood, are only of greatest value when the disease has passed the operable period, and often the beginning or the extent of cancerous invasion can only be positively known by an exploratory incision. The well-trained surgeon will commit no evil here, for if the disease is in the inoperable stage, the incision will cause but little trouble, and if not, there will be a malignant or other organic involvement that indicates the necessity for surgical treatment. The incision for exploration should

be short, and if the peritoneum be sutured by fine catgut, the fascia by silver wire or silk, and the skin also by fine catgut, the patient may leave the hospital in a few days and not remain in bed.

Osler recommends that an exploratory operation should be more frequently advised by the physician, and his opinion on this subject is entitled to much consideration, because of the extent and excellence of his work in cancer of the stomach.

Pain and vomiting and the perception of a tumor in the stomach are frequent symptoms in gastric cancer, Mayo Robson's statistics showing pain in 86.6 per cent., vomiting in 85.3 per cent., and tumor in 76.6 per cent.; and Fenwick says a tumor may be palpated in the body of the stomach in 81 per cent. of cases, in the pylorus in 71 per cent., and in the fundus in 55 per cent. While gastric ulcer may cause rigidity of the recti muscles, this is not true of cancer, and if the tumor is not situated too high, or can be forced down by full inspiration, it may be palpated with comparative ease. A well-defined tumor of the stomach does not always indicate malignancy, for patients with tumors at or near the pylorus have been permanently relieved of symptoms by a gastroenterostomy, and tumors attached to the abdominal walls with infiltration have disappeared when adhesions were separated, though a diagnosis of cancer had been made before and after the operation. The surface of a benign gastric tumor is regular and even, but the malignant tumor is irregular and nodular. Gastroenterostomy or the removal of adhesions never cures cancer, but may cure patients supposed to be suffering with cancer, who may otherwise have finally died of this disease. This error in diagnosis may explain the false assumption that gastric cancer is relatively increasing in frequency, for many of these patients having died without operation, were recorded cancer, no necropsy being made.

The following summary will indicate most of the diseased conditions of the stomach and duodenum, with their varied complications, that may be treated surgically:

1. Hemorrhage from ulcer.
2. Gastric or duodenal perforation.
3. Chronic gastric or duodenal ulcer.
4. Benign pyloric stenosis and retention.
5. Perigastric adhesions and contracted stomach.
6. Gastric cancer.

Hemorrhage in acute gastric ulcer, though profuse and with alarming symptoms, is usually self-limited and needs surgical treatment only when continued repetition shows that it will not be controlled by treatment of the physician. In such event, the bleeding may yield to stomach drainage at the most dependent part, which may be best accomplished by gastroenterostomy. The treatment applied immediately to the ulcer after opening the stomach, or by excision of the ulcer, has not been successful, and is also contraindicated because of the relatively high mortality, and because the ulcer is often multiple.

While some of these patients may permanently recover, other cases pass gradually or imperceptibly into the chronic stage, and we may find them many years later with chronic gastric ulcer or cancer, with abundant perigastric complications. But in acute ulcer, a far greater danger than hemorrhage is the large perforation that may occur, through which the contents of the stomach or duodenum may freely flow into the peritoneal cavity, causing death by diffuse suppurative peritonitis, unless promptly operated on. These patients should be operated on both promptly and quickly, for they will not recover from a delayed or prolonged operation or a too profound anesthetic. Any stomach contents or pus that may be in the immediate vicinity of the perforation should be gently sponged away, but I doubt if further sponging will benefit the patient, and its employment may greatly impair the peritoneal resistance. If the infection is streptococcic, the patients will all die under any treatment; otherwise many cases with diffuse suppurative peritonitis may recover, if, after suturing the perforations, a stab opening be made in the lower abdomen and drainage instituted through a tube introduced into the uterorectal pouch, or the vesicorectal pouch in the male.

Any attempt to cleanse the peritoneal cavity by persistent sponging may so destroy the protecting endothelium as to encourage rather than prevent the growth of pathogenic bacteria, and thorough irrigation with saline solution may do no good, and may do much harm. If the infection is not streptococcic, it may not be primarily virulent, and the pus may soon become practically sterile if the cavity is allowed to drain itself from the most dependent part, and we do not irritate and impair the resisting powers of the peritoneum.

In chronic gastric ulcer, with or without pyloric stenosis, we should establish drainage that will allow the stomach contents to pass freely into the intestine with the least possible effort, and, great relief will promptly follow. If there is no organic obstruction in the pylorus, but retention of stomach contents because of spasmodic contraction caused by ulcer in this locality, then the only method we can logically employ is gastroenterostomy, but when the ulcer soon heals, complications may arise when the food again passes freely through the pyloric opening. The gastrojejunic opening may then contract, leaving the intestine attached with impaired peristalsis.

In organic obstruction in the pylorus, free stomach drainage is also the only rational treatment, and of the various methods practiced, gastroenterostomy is the one generally accepted by our best surgeons, and seems to have given the best immediate and subsequent results, with the lowest mortality. Theoretically, we might prefer drainage at the pyloric end of the stomach by some of the various operations devised, but the results are not in harmony with the theory. Pyloric divulsion by the method of Loreta and Hahn has proven unsatisfactory, and the results are never permanent; nor do we feel much encouragement from the results of the Heineke-Mikulicz pyloroplasty, or its modification by Richardson, or of the submucous pyloroplasty of Koeppelin and Jaboulay, where the incision is made to but not through the mucosa; or the gastroduodenostomy of Jaboulay and its modifications by Duranti and Henle. Probably the operation by Finney, for drainage at the pyloric end, known as Finney's pyloroplasty or gastroduodenostomy—which should be more correctly called pylorogastroduodenostomy—will give better results; but this is not suited to many cases, because of the necessity of dealing with the frequent perigastric adhesions, to enable the operator to unite the surfaces without tension. As this operation was performed only a few years ago, more time is needed to prove its continued success in drainage.

While gastroenterostomy, devised by Nicoladoni in 1881, is now the operation of general election, there is no consensus of opinion of just how and where the anastomosis should in all cases be made, but good results are

only obtained by drainage through a gastrojejunic opening. It is agreed, however, that the union should be made at the bottom of the stomach, just anterior or posterior to the attachmenf of the gastrocolic omentum, equally good results having been claimed by either method. The anastomosis may be made by the suture or the Murphy button, the same operator sometimes using one and again the other; but the tendency is in favor of the suture, except in specially selected cases, Murphy uses the button; Ochsner and Mayo have used both button and suture, but generally the latter. Czerny uses the button, and believes it is efficient in preventing the vicious circle. The bone-bobbin of Robson, and other similar devices, are seldom of any use when the surgeon becomes adept in using his needle.

In anterior gastroenterostomy, where an immediate gastrojejunic opening is not required, I believe the McGraw ligature method will finally be recognized as the simplest and the best, and there is no reason why the opening should not be as large as by other methods and remain as long patulous. It can be done quickly, and the danger of infection is reduced to a minimum, neither the stomach nor intestine being incised.

The retention of the Murphy button in the stomach will seldom occur if the incision be correctly made at the base of the stomach and its retention in the bowel is infrequent. The German "circulous viciosus," for the prevention of which we formerly did a jejunojejunostomy, is generally prevented by our modern methods, as we now seldom do the interoenterostomy of Wölfler, or the modification of Roux between the afferent and efferent limbs of the attached intestinal loop, or its modification by Fowler, who occludes the afferent limb with silver wire. The Mikulicz and Czerny recent modification in posterior gastroenterostomy, by which they eliminate the afferent loop, may yield excellent immediate and subsequent results, as the jejunum is attached to the stomach only three or four inches below its emergence under the mesocolon and on a level with the base of the stomach. If this operation is to be finally the operation of election, it may not only eliminate the possibility of a vicious circle, but also prevent jejunic ulcer by alkalizing the gastric contents with the bile and pancreatic secretions. While gastroenterostomy is indicated in hourglass contraction of the stomach, the operation alone will not be successful unless the pyloric saculus is very small, but it should be preceded by a gastroplasty or a gastrogastrostomy, and then the attachment of the intestine must be made to the pyloric end, otherwise drainage can never be complete and there will be retained in the stomach decomposed and foul-smelling food and secretion.

In all operations for gastric contractions, the stomach should be carefully examined to its fundus, for we may have a saculus at the dome, and then drainage from the pyloric saculus may not greatly, if at all, benefit the patient.

As these contractions may be caused by perigastric fibrous bands, the deformity may be removed by dividing them or dissecting them off. Perigastric adhesions may change the normal relation and physiologic action of the stomach, duodenum, gall bladder and bile ducts, and should be separated or divided as completely as possible, so as to establish an approximately correct relation. While the separated adhesions may possibly re-form, they will not do so to the same extent, nor will the new adhesions as greatly interfere with the physics of these organs. In rare instances the separation of adhesions may cure the patient without stomach drainage, as in a patient I recently operated on. He had several years previously suffered with either gastric or duodenal ulcer, and had symptoms of obstruction and adhesions, which caused constant pain. No evidence of the scar of an old ulcer could be found, and the gall bladder and bile ducts were normal, but extensive gastroduodenal adhesions had caused partial pyloric obstruction by drawing the upper part of the duodenum against the pyloric end of the stomach, the normal relation being restored when the adhesions were removed.

In considering the surgical treatment for cancer of the stomach, we must not be influenced by the results of Billroth or his immediate followers, or, in fact, by any results except in patients recently operated on; nor must we see any value in the older statistics, further than to show by comparison with present methods and results, an evolution that has removed most of the former dangers. Billroth's operations for pylorectomy and gastrectomy were bloody and prolonged, most of his patients leaving the operating table in profound shock, from which but few recovered. But, then, the histology, physiology and anstomy of the stomach and perigastric structures were not practically appreciated. This is especially true in relation to the blood vessels and lymphatics of the stomach and the gastrohepatic and gastrocolic omenta; hence we did not know how easily pylorectomy and partial gastrectomy could be made nearly bloodless operations, or how much of omenta and stomach should be removed or the direction of the line of incision in resections, or the value of closing the end of the duodenum and the stomach, and establishing drainage through a gastrojejunic opening. Mayo's mortality in the various operations for cancer of the stomach in 109 cases is 15.5 per cent.; and in 41 radical operations on the pylolric end of the stomach, 4 for ulcer and 37 for cancer, 8 died, but in his last 11 he has had no death.

In many cases of cancer of the stomach, the disease is so extensive and so many complications have developed that a radical operation for permanent relief is contraindicated, but in these cases much relief may be afforded by a gastroenterostomy, where enough healthy stomach tissue can be utilized, or, if this is not possible, pain may be greatly relieved and life prolonged by a gastrostomy or jejunostomy, putting sufficient food in the jejunum through a Jaques catheter. The mortality in gastrostomy and jejunostomy is practically *nil*, and Mayo Robson's recent mortality in posterior gastroenterostomy for simple diseases is 3.9 per cent and for cancer but 5 per cent. In pylorectomy or partial gastrectomy in benign pyloric obstruction, gastroduodenostomy can never be an operation of general election, and in cancer it should never be attempted. Theoretically, it would seem to possess some advantages over gastroenterostomy, but practicallly it does not, and the increased mortality contraindicates the operation. While the open end of the duodenum may sometimes be brought without tension to the lower part of the remaining stomach and be anastomosed, this is seldom possible because of the firm inelastic adhesions which can not be entirely removed, and where there is tension there can be no safe union. These objections do not apply to gastroenterostomy, and the gastrojejunic opening will remain permanently patulous in either anterior or posterior union. Patients have recovered from the operation for total gastrectomy and lived for one

or two years, but I do not believe the operation is justifiable, based on our knowledge of the location and behavior of gastric cancer. Cuneo's observations on the lymphatic currents were utilized by Hartman when he fixed the line of section in partial gastrectomy, and these facts have been accepted by our best surgeons.

In the radical operation for simple pyloric stenosis with hypertrophy, it has been suggested by Rodman that extensive resection beyond the lymph nodes may give better permanent results, because of the removal of pyloric ulcer and cancer areas, except in the dome and cardia. In cancer of the dome of the stomach or the cardia, total gastrectomy is a difficult and dangerous operation, with nearly 100 per cent. mortality, and if primarily successful will not give more continued relief than gastroenterostomy. In cancer of the body of the stomach a gastroplasty may be indicated if seen in the earlier stages. While the stomach is as abundantly supplied with blood vessels as any organ of the body, and anastomosis as perfect as in the vessels supplying the uterus, and in a degree similar, hemorrhage is easily controlled in radical operations by ligating the principal branches beyond the lines of incision. If the coronary branch of the gastric, the pyloric branch from the hepatic and the right and left gastroepiploica be ligated at the correct place, hemorrhage will not be profuse in radical operations at the pyloric end of the stomach extending up the lesser curvature nearly to the cardia. It must be remembered that the blood is derived from each of the three branches of the celiac axes—the gastric, splenic and hepatic. In partial gastrectomy I see no advantage in Mayo's curved incision with the convexity toward the dome, but prefer using the long straight forceps, and making a direct incision from the greater to the lesser curvature. This as successfully removes the infected area, and gives a broader and better stomach surface for jejunic attachment.

THE PREVENTION OF TETANUS.

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Much has been written during the past ten years concerning the symptoms and treatment of tetanus, and especially the frequency with which it followed all varieties of punctured wounds. Little, however, has been written as to definite methods for the prevention of this dread disease, and it has always seemed to me that this aspect has not been sufficiently dwelt on. We usually associate tetanus with Fourth of July wounds, but it is almost as frequent after punctured wounds received by rusty nails or pitchfork injuries as after blank cartridges. Why these three classes of injuries should be followed by tetanus can not be explained on any other ground than that in the case of blank cartridges the latter itself is free from tetanus, but that the hand or foot or face, which are the most frequent sites of infection, are more or less covered with street dirt containing tetanus bacilli, and that the blank-cartridge wound furnishes the ideal conditions for the development of the tetanus bacilli. These conditions are a more or less completely closed wound, containing a foreign body in the shape of a portion of the cartridge.

It has been shown experimentally that the pathogenicity of the tetanus bacillus is increased by irregular wounds where there is more or less necrosis, or in the presence of a hematoma, especially if a foreign body be present. In the case of rusty nails one does not have to seek far to explain the origin of tetanus after such wounds. It is not the rust on the nail, as has been generally thought, but the fact that the nail is covered more or less with dust and street dirt, and that the sole of the foot or the palm of the hands are, as in the case of a blank-cartridge wound, in none too clean a condition, being almost invariably covered with dirt at the time of the reception of the injury. In the case of pitchfork wounds a somewhat similar origin can be demonstrated. It is well known at the present time that the tetanus bacillus is found under normal conditions in the intestine of horses, and that the spores are present in horse dung, manured gardens, street dirt and poorly built wells. It does not require a great stretch of imagination to see how a pitchfork, either covered with street dirt or horse dung or garden earth, can carry into a punctured wound many tetanus bacilli. It has been amply shown that the blank cartridge itself does not contain tetanus bacilli. In the exhaustive article on "Fourth of July Casualties," published in THE JOURNAL of the American Medical Association, Aug. 29, 1903, five investigators are quoted who have examined 759 blank cartridges, bacteriologically, without finding tetanus bacilli in one.

My principal reason for writing this article has been to call attention to the fact that if a punctured wound which has been inoculated with tetanus bacilli be treated sufficiently early by methods which are based on the knowledge of the bacteriology of the disease, we can absolutely prevent the development of tetanus in every case. The tetanus bacillus, I need scarcely mention, is an anaërobic organism, and is surrounded by ideal conditions for its growth in punctured wounds. After the foreign body, whatever it may be, has penetrated the skin and underlying soft parts, the edges of the wound of entrance are rapidly closed by wound secretion, and we have a closed cavity, as I have been able to demonstrate on a number of occasions, devoid of oxygen, and an ideal place for the development of the tetanus bacillus. Add to this the necrosis and blood clots, and it requires only a short time before the symptoms of tetanus appear. When we consider that human beings, mice and guinea-pigs, are exquisitely sensitive to the toxins of tetanus, and that it requires only 1/100,000 to 1/10,000,000 of a cubic centimeter of tetano-toxin to kill a mouse, we can readily understand how a few tetanus bacilli can produce the necessary amount of havoc within a comparatively short space of time.

The period of incubation varies somewhat, according to the severity of the infection. According to Bruner, when the incubation period was one to five days, nine cases died and one recovered; when the period of incubation was five to ten days, eighteen died and eight recovered; when it was ten to twenty days, none died, and six recovered. From this we can deduce that the longer the period between the infliction of the injury and the appearance of the symptoms, the less severe the case. Many of the cases of tetanus which have responded to the tetanus antitoxin have belonged to the subacute variety.

In regard to the prospects of recovery after the development of tetanus, one needs only to bear in mind the large percentage of deaths, even after the use of antitoxin and medicinal remedies, such as morphin, bromids, chloral, etc. Ullrich has lately collected 19 cases, in which the Behring tetanus antitoxin was injected between the second and the fifth days. Of the nineteen,

9, or 47.3 per cent., recovered, and 10, 52.6 per cent., died. Including 53 cases treated during the same period of the appearance of the symptoms by other antitoxins, there are 72 cases, of which 39 (53.8 per cent.) were healed, and 33 died (45.5 per cent.) Twenty-three of these had an incubation period of ten days. Of these, 16 were healed (59.7 per cent.), which verifies what I have stated above, that the percentage of recoveries improves when the antitoxin is used late, because these are the milder cases; that is, those with longer periods of incubation. Of 15 cases collected by Kupnik, treated symptomatically with chloral, etc., 53 per cent. recovered. These were, in all probability, subacute cases.

In regard to the manner in which the tetanus toxin reaches the nerve-centers, there can no longer be any question that it is along the nerve trunks from the infected part, causing the characteristic symptoms through their toxic action on the nerve-centers of the pons and medulla, and then acting on the cranial nerves arising from this portion of the brain, thus explaining the early involvement of the fifth nerve. We thus see that the curative treatment of tetanus leaves much to be wished for, and we can only hope to reduce the high mortality of the disease through prophylactic treatment.

The technic which I am about to give can be summed up briefly as consisting of converting a closed wound filled with necrotic débris, blood clots and foreign bodies (blank-cartridge wads), into an open one, so that there can not be the least corner of it in which a tetanus bacillus finds its necessary conditions for growth. Before referring to my own work, let me call attention to a case which has been far more thoroughly worked out than any of those which I have to report, published in the *Annals of Surgery* of the present year, by J. B. Bain of the Massachusetts General Hospital. It is the first case in which tetanus bacilli were ever found before the development of symptoms of the disease, thus proving the theory that prophylactic treatment can actually be carried out, even though tetanus bacilli are in the wound, and can be demonstrated as such positively by bacteriologic tests. The case is as follows:

A boy of thirteen was shot in the palm of the right hand with a blank cartridge July 3, 1902. A punctured wound was present, with blackened edges and surrounded by an area of powder-stained tissue. Every bit of blackened skin and tissue was removed; the wound thoroughly disinfected. All of the tissue, together with particles of the wad and powder grains, was placed in culture tubes and sent to the laboratory to be examined for tetanus bacilli. The latter were isolated in pure cultures. The patient made a prompt recovery without the development of any of the symptoms of tetanus.

A somewhat similar case has been reported lately by Ullrich, quoted above, in which a man's arm had been torn off at the shoulder joint. The patient was a diabetic, and the wound became infected with the pyocyaneus bacillus. No examination was made for tetanus bacilli. On the third day after the injury a prophylactic dose of antitetanic serum was given. No symptoms of tetanus appeared until two months after the injury, when he had twitchings in the face, pain on mastication, trismus, hyperesthesia, sweats, etc., these symptoms continuing for two months, and were interpreted—as I believe to be perfectly justifiable—as having been tetanic.

During the past four years I have had occasion to treat eight cases of blank-cartridge and punctured wounds, with the direct view of preventing the development of tetanus. Of this number five were blank-cartridge wounds, three involving the fingers or palm of the hand, one the thigh, one the eyelid, and three cases were punctured wounds—one due to a pitchfork entering the ankle joint, and two rusty nail wounds penetrating the entire thickness of the foot from the sole of the foot to the dorsum. One of these cases described in detail will illustrate the treatment applied to all of them.

A boy 10 years of age was shot in the palm of the hand while handling a toy revolver. Four days later there was the usual swelling in the palm of the hand and discoloration of the skin around the wound of entrance.

As in all of the above cases, where the wounds contained either blank-cartridge material or dirt which had been carried in by rusty nails or pitchforks, I would only consent to assume the responsibility in the case when the parents or the patient himself consented to the administration of an anesthetic in order to thoroughly cleanse the wound.

The cleansing was done in the present case in the following manner: An Esmarch constrictor was applied around the middle of the arm well above the point of infection, for the reason that one can only deal satisfactorily with any of the forms of infective wounds of the extremities when the tissues are bloodless, so that one can see the extent of the infection without constantly having the field of operation flooded with blood. After thorough disinfection of the entire forearm and hand by the usual methods, an incision was made directly over the palm of the hand and the entire tract of the blank cartridge followed. It extended from the middle of the palm of the hand to the base of the first phalanx of the middle finger. All of the connective tissue of the hand and the muscles lying between the metacarpal bones, as well as the tendon sheaths, were found to be encrusted with particles of powder, and the tract itself contained about a teaspoonful of the typical blackish-green pus which one encounters in this class of wounds. After wiping away the pus, a tissue forceps and scissors were employed to cut away every particle of powder-stained tissue, as only in this manner can the wound be thoroughly cleansed. After this had been done, the edges of the wound having been held apart during the entire procedure by means of retractors, the skin along the edges of the tract, and especially around the wound of entrance, was excised, so that as far as the naked eye could determine, there were no blackish particles left in the wound. At the distal end of this suppurating tract a blank cartridge was found which showed a typical paper wad. Unfortunately cultures were not made at the time of the operation. The entire wound area was now swabbed with pure carbolic acid, followed immediately by the application of 96 per cent. alcohol, and packed with gauze, and a wet 1 to 1,000 salicylic acid dressing applied, and the hand was placed on a splint. No sutures were employed. The wound was allowed to heal by granulation. Immediately after putting the patient to bed, 20 cubic centimeters of tetanus antitoxin were injected to neutralize any of the tetanus toxin which might have been absorbed prior to the time of operation.

The after-treatment consisted in irrigating the wound daily with mild antiseptic solutions (1 to 1,000 salicylic acid and peroxid of hydrogen), and was then repacked. The patient made an uneventful recovery without showing any symptoms of tetanic intoxication.

A similar treatment was employed in all of the other cases, the first five not being given the prophylactic dose of tetanus antitoxin, but in spite of this making as prompt a recovery as the case that has been detailed.

SUMMARY.

The points which I desire to emphasize in the prophylactic treatment are the following:

1. Early and thorough exposure of every portion of the tract which has been infected by the blank cartridge

or instrument which caused the punctured wound, retracting the edges, so that the disinfection and removal of the infected tissues can be done under the guidance of the eye.

2. Prophylactic injections of tetanus antitoxin to aid the organism in combating whatever toxins may have been absorbed prior to the time of operation.

3. This thorough disinfection can only be carried out under anesthesia, either local or general, and when the parts are rendered bloodless by the application of a constrictor.

4. The blank cartridge itself does not contain tetanus bacilli, but undoubtedly carries them in while penetrating the skin.

5. The instruments which cause punctured wounds either are covered as described above with tetanus bacilli or the manure of horses, etc., and are thus carried into the wound.

6. Our only hope in reducing the high mortality of tetanus is in a thorough application of such radical measures as have just been described.

SUPRAPUBIC PROSTATECTOMY UNDER NITROUS OXID ANESTHESIA.*

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That the removal of the prostate gland is the ideal surgical procedure in the treatment of prostatic hypertrophy is now very generally recognised. The chief contraindication to the performance of a prostatectomy up to the present time, according to the consensus of opinion, has been the danger resulting from the administration of ether or chloroform. Many surgeons have hesitated to offer some of their old prostatic cases the benefits of the operation on account of the presence of cardiac, nephritic or other lesions. It is in the hope of widening the field of usefulness of prostatectomy, and of extending the splendid benefits of the operation to patients who have heretofore had the advantage only of palliative operations, that this paper has been prepared. The cases which form the basis of the paper are, so far as I have been able to ascertain, the first cases of prostatectomy that have been performed without the use of ether or chloroform.

CONTRAINDICATIONS.

The chief contraindications to the performance of prostatectomy have until recently been the dangers resulting from first, the general anesthetic; second, hemorrhage; third, shock. By the use of laughing gas the great objection of a general anesthetic is at once removed. If, in addition, we do rapid work, then all three of the objections are removed. A prostatectomy done under nitrous oxid, in from eight to fifteen minutes, is not accompanied by any dangers from the anesthetic; the hemorrhage in those few minutes is very moderate and there is no shock. The patients are conscious even before the dressings have been applied. There is no vomiting; the pulse remains normal, and in a few minutes fluids are taken by mouth. Many surgeons have held that a man unfit for general anesthesia is unfit for prostatectomy. In view of our experience with laughing gas, are we not justified in asserting that this view is erroneous? Is it not likewise erroneous to hold that a man who can not take ether or chloroform should have a Bottini operation done? Is he not very much better off if he has a prostatectomy done under laughing gas? Diabetes is still considered by most surgeons an absolute contraindication to prostatectomy. So it probably is, if the operation takes forty-five minutes or longer, and if ether or chloroform is used. But if the suprapubic operation be done in ten minutes without ether or chloroform, then diabetes is no contraindication. Two of my cases were diabetics, and one of them had large amounts of glucose in the urine at the time of the operation and during the after-treatment. Yet both these cases recovered. A badly infected bladder is often given as a contraindication. In one of my cases (Case 5) there were daily chills as a result of a severe cystitis, and the urine contained a large amount of pus. After draining the bladder for ten days, the prostate was removed *in toto*, and the man made a splendid recovery. And that is just one of the advantages of the operation—that we can, in badly infected cases, first relieve the cystitis, and then, through the same opening, remove the prostate in a very few minutes. Again, we are told that old age is a bar to the removal of the prostate. The patient just referred to was 75 years old; another man was 82 years old. It is a curious fact that these two very old men made a more rapid recovery than the younger men. What, then, are the contraindications for the performance of a suprapubic prostatectomy under laughing gas? Candidly, I do not know. What I do know is that there are very few, even old diabetic cases with severe infections of the bladder, that can not be cured by the operation. This statement may seem extreme, but a careful study of the cases narrated below will, we believe, confirm its truth.

Many objections have been raised to the operation. Chief among them are severe hemorrhage, the infection of the raw surface left by the removal of the prostate, poor drainage and the difficulty of the operation. Chief among the objectors are those who do not perform the operation. As regards hemorrhage, I have never experienced a severe one, nor have I seen it at the hands of others. The infection of the raw surface at the base of the bladder we would expect, at first sight, to occur much oftener than it does. I do not know of a single case in which this complication was encountered. The use of urotropin and of bladder irrigations effectually prevents its occurrence. The opponents of the operation tell us that we are draining uphill. So we are. But by using syphon drainage, together with daily flushings of the bladder, we find that our drainage, from the very time of operation, is excellent. The entire wound is left open, and we never have any difficulty in draining it. The same objection to uphill drainage might be raised in all our operations on the appendix and gall bladder. It would be just as valid as it is in regard to the bladder. The difficulty of performing the operation has been raised as an objection. We are told that great strength is required to shell out the prostate rapidly. The advantages of removing the gland in one piece are twofold: the hemorrhage is less and one is sure of having removed the entire gland. That a great deal of strength is generally required I can testify. The objection, however, does not apply to the operation, but to the operator.

AGE OF PATIENTS.

The youngest of my patients was 57 years old, and the oldest 82 years. The average age was 69 years.

* Read before the Harlem Medical Association of New York, March 2, 1904.

The patients, with one exception, had been married men, and each had had several children.

RESIDUAL URINE.

Four of the cases had complete retention, which, in one case, had persisted for five years. In only one case was the amount of residual urine small. All of the patients had been under medical treatment for a considerable time before operation.

DIAGNOSIS.

The diagnosis was made in every case from the history and from the rectal examination. In no case was a cystoscopic examination made. I believe, and in this belief I do not stand alone, that the cystoscope is not only an unnecessary, but often a dangerous instrument to use in the presence of marked prostatic enlargement. The information it gives us is often incomplete, and the harm it does is often great. It not rarely sets up an acute cystitis, the very thing we wish to avoid before operation. The less instrumentation to the urethra and bladder before the operation, the better for the patient and for the surgeon.

TECHNIC OF THE OPERATION.

With a few modifications, I have carried out the technic as I have seen it employed by Dr. Lilienthal at Mount Sinai Hospital. It was due to the gratifying results obtained by Dr. Lilienthal that I first attempted the operation. Much time and thought have been devoted to the problems of shortening the time of operation, lessening the shock and simplifying the after-treatment. Not one of the cases that form the basis of this paper came to the operating table in good condition, so the necessity for avoiding operative shock was evident. Moreover, two of the cases were old diabetics, and one of the patients was suffering from chronic sepsis. In none of the cases was it considered advisable to administer ether or chloroform. I doubted the practicability of doing the operation exclusively under laughing gas, as did others with whom I discussed the matter. Its repeated use has demonstrated not only its practicability, but also its desirability. Its use certainly lessens the dangers of the operation and at the same time widens its scope.

We have found that the time of operation can be reduced by cutting down on a distended bladder. If necessary, the bladder can be irrigated for several days before operation. Urotropin is given before operation. The patient is allowed to hold his urine for about twelve hours, and comes to operation with a distended bladder. With the patient in a moderate Trendelenburg position, a small incision is made above the symphysis pubis in the median line. The incision is deepened either between the two recti muscles or through the fibers of one rectus. Two silk-guide sutures are introduced into the wall of the bladder, and the viscus opened by a small incision in the median line. The interior of the bladder is rapidly explored by the finger, the size and relations of the prostate ascertained, and calculi that may be present removed. With a long-curved scissors, slipped along the index finger of the left hand as a guide, the mucous membrane over the prostate is incised. We make the incision over the most prominent portion of the prostate, and never make it more than half an inch long, just large enough to admit the tip of the index finger. The incision may be anterior, posterior or lateral to the urethral opening. If the prostate is deeply seated, it is pulled upward into the bladder by means of a special vulsellum forceps. If necessary, an assistant can press upward on the perineum, and in that way push the prostate further into the bladder, but we have not usually found this necessary. Up to this point there is little or no bleeding. The more rapidly the operation is now concluded, the less hemorrhage there will be. The entire prostate is shelled out of its capsule by the use of the index and middle fingers, first of one hand and then of the other. I have been accustomed to free the gland on the right side and posteriorly with the right hand. Then, by turning my back to the field of operation and introducing the left hand, the left side and anterior portions of the gland are freed. The *sine qua non* of this step of the operation is to work between the capsule of the gland and the gland proper; there is then no danger of wounding neighboring structures. As soon as the gland has been removed, a rapid examination is made with the finger to ascertain if any portion of the gland has been left behind. Without any irrigation of the bladder, a strip of plain sterile gauze is packed firmly against the raw surface left by the removal of the prostate.

AFTER-TREATMENT.

Equally important as the operation is the proper after-treatment. Fortunately, increasing experience has taught us many valuable lessons. It is essential to begin with continuous bladder drainage immediately after the operation. This drainage not only prevents infection of the perineal and prevesical regions, but also of the epididymis. At the same time it removes the necrotic shreds from the bladder and hastens the healing process. The packing that was introduced into the bladder at the time of operation is removed at the end of twenty-four hours, and thereafter no packings are employed. During the first two or three weeks the bladder should be irrigated twice daily. Either urotropin or some other urinary antiseptic should be continuously administered, and the urine should always be kept acid. The patient is allowed to sit up out of bed on the fourth or fifth day after operation, and a few days later is allowed to walk about his room. The healing of the suprapubic wound is hastened by keeping it well strapped with zinc oxid plaster. As the wound contracts a smaller tube is introduced into the bladder. As soon as no more shreds of necrotic tissue appear in the urine, the tube can be left out, and the wound may then be allowed to close. The time that the tube must be allowed to remain in the bladder varies with the size of the prostate that has been removed, and with the patient's power of recuperation. Two and a half to three weeks may be considered the usual time. After the tube has been removed, the bladder should still be washed out every day or two, either through a catheter passed per urethram, or through a small tube passed into the wound. The writer believes that in every case a sound ought to be passed three weeks after the operation, and thereafter regularly once a week for three or four weeks longer. A Mercier catheter may be used instead of a sound. The only case in this series that did not get a perfect result was one in which this sounding was omitted, and a stricture of the prostatic urethra resulted. This can and should be avoided in every case by passing a sound once a week after the third week.

CASE 1.—W. N., 82 years old, referred by Dr. Max Rosenthal. Three weeks before I saw him for the first time, he had been suddenly seized with retention of urine. Following this attack there was complete retention until the time of operation. High up in the rectum a moderately large prostate

was felt. A soft rubber catheter passed readily into the bladder.

Operation.—Jan. 28, 1903, under laughing gas, to which a few drops of ether were added, the bladder was opened through a median suprapubic incision. The bladder was very vascular and very much thickened. A two-inch incision was made through the anterior wall and the interior of the bladder explored with the finger. The prostate was large and hard, the bladder sacculated, but no stones were present. The bladder mucosa covering the prostate was nicked with scissors in the median line posterior to the urethral opening. The entire prostate was then rapidly enucleated by the index and middle fingers, first of one hand and then of the other. A strip of plain gauze was inserted into the opening left by the removal of the prostate, and a drainage tube introduced into the bladder. The fascia at the upper angle of the wound was sutured, and the skin incision closed with zinc oxid plaster. The loss of blood was very moderate, and the entire operation lasted only fourteen minutes.

The prostate was two and a half inches in diameter, very hard and fibrous, and it was traversed by the prostatic urethra. There was not the slightest shock following the operation. The packings were gradually removed, all being out on the fifth day. The patient was then allowed to leave his bed.

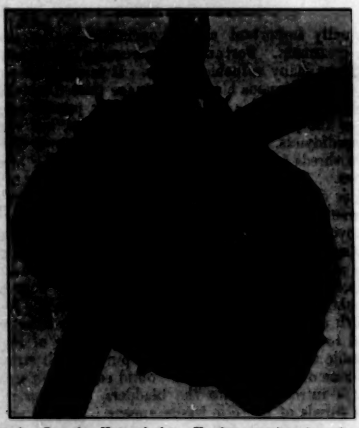


Fig. 1.—Case 1. Natural size. Urethra running through center of prostate.

The tube in the bladder was connected with a bottle under the bed, and the bladder was thus drained day and night. February 22 the tube was removed and the patient for the first time urinated voluntarily. Bladder irrigations were begun on February 11 and thereafter continued. Following the removal of the tube the wound healed rapidly. More and more urine was passed by the urethra and less and less escaped through the wound. March 12 a 23 F. sound was readily passed through the urethra into the bladder. After March 13 no more urine escaped from the wound. March 17, after passing three ounces of urine in the recumbent position, only two-thirds of an ounce of residual urine were found. March 23 there was absolutely no residual urine, and on the following day the man left the hospital with a completely healed wound.

Eight and a half months after operation, while I was out of the city, he returned to the hospital with signs of a cystitis. He stated that he had taken no urinary antiseptics during all that time. Dr. Lilienthal found several small calculi in the bladder and removed them through a suprapubic incision. The bladder was drained for a week, and the wound then rapidly healed. The patient is now perfectly well.

CASE 2.—S. S., 65 years old, referred by Dr. R. G. Wiener. In July, 1903, the man was seized with severe pain in the region of the bladder, together with very frequent urination, accompanied by straining. At that time I saw him for the first time. The prostate was moderately enlarged and tender. No catheter, rubber, silk or metallic, could be passed into the bladder. The catheter was regularly obstructed at the prostatic urethra, and attempts at catheterization were followed by bleeding. The patient remained in bed one week; the diet was regulated and urotropin was given. Following this attack there were repeated attacks of a similar nature, gradually increasing in frequency. Nocturnal dribbling of urine set in and became a distressing symptom. May 4, 1903, he entered the hospital. Rectal examination showed that the prostatic enlargement had become more marked since the first examination. There were twenty-two ounces of residual urine. The urine was acid, sp. gr. 1008, no albumin, no sugar; microscopically a few pus cells.

Operation.—May 6, 1903, under laughing gas exclusively, a median suprapubic incision was made down to the bladder. The bladder was much dilated both from side to side and from above downward. The bladder mucous membrane over the most prominent portion of the tumor was incised and the prostate shelled out in one mass. The very moderate hemorrhage was controlled by the introduction into the bladder of a large rubber tube filled with gauze. No sutures were used, but the wound was strapped with zinc oxid plaster. The time of operation was seventeen minutes.

The prostate was as large as a lemon, and was traversed by the prostatic urethra. Both lateral lobes were enlarged, and a nodule the size of a walnut hung down from above the urethral opening, forming a typical ball-valve. This probably accounted for the large amount of residual urine.

Following the operation there was neither shock nor hemorrhage. One hour after operation the patient began to take fluids by mouth. One week after operation the man got out of bed. May 24 the right testicle became tender and enlarged. Three days later the induration ran up the right cord. Aspiration in the upper part of the scrotum yielded first a straw colored fluid and then a few drops of pus. A small incision was then made under eucain and a cloudy, purulent fluid evacuated. Thereafter recovery was rapid and the man left the hospital in excellent condition June 15. He was then passing four to eight ounces of clear urine and there was no residual urine. The suprapubic wound soon healed completely and the man is now perfectly well. His urine is clear, he has no residual urine; he has gained almost twenty pounds since the operation, and he states that he feels better than he has in many years.

CASE 3.—W. C., 57 years old, was referred to me by Dr. J. D. Khodoff. The patient was under my observation several weeks before I referred him to Dr. Lilienthal's service at Mount Sinai Hospital, July 3, 1903. I am indebted to Dr. Lilienthal for his courtesy in allowing me to include the case in this series. Dr. Khodoff had on numerous occasions found glucose in the urine. During his stay at the hospital no glucose was found. At the age of 42 the patient had had an attack of cystitis, lasting a few weeks. Ten months before his admission to the hospital his urination began to be painful and an increased frequency was noted. The pain and the frequency of urination gradually increased until the man had to pass his water every ten or fifteen minutes during the day, and four or five times at night. The pain and straining accompanying urination finally made a complete wreck of him. Rectal examination revealed a moderately large prostate.

Operation.—July 6, 1903, under laughing gas anesthesia, I opened the bladder through a median suprapubic incision. A small opening into the peritoneum was sutured with catgut. After introducing guide sutures, the bladder was opened. There was a moderate enlargement of the entire prostate and the organ projected into the bladder. The capsule was firmly adherent to the gland proper, and it was shelled out with great difficulty. The entire mass was about half the size of a lemon. Bleeding was profuse, but it was readily checked by introducing a large cigarette drain into the bladder. No su-

tures were employed. The time of operation was nineteen minutes. The entire tumor lay behind the prostatic urethra, and no portion of the urethra was removed.

Five days after operation the patient was allowed to get out of bed. The temperature rose to 100 F., but it soon dropped to normal and remained there. Six days after operation the man complained a great deal of severe pain in the lower part of the abdomen; this was relieved by bladder irrigation. The pain recurred on the following day and the bladder irrigation gave partial relief.

Eighteen days after operation the tube was removed from the bladder during the entire day. The abdominal pain and discomfort were so severe that the bladder had to be washed out several times. In the evening the tube was reinserted and the patient was then more comfortable. On the following day the man complained of diplopia and pain in the left eye.

On July 21 a sound was passed into the urethra; it met with an obstruction at the neck of the bladder. However, on the following day, twenty-six days after operation, a soft catheter was readily inserted through the urethra into the bladder. It was then assumed that the urethra would remain patent and that no further sounding or passing of a catheter was required. The result showed that this was a wrong assumption.

August 19 the wound was almost healed, but the man was unable to urinate voluntarily. Neither a catheter nor a sound could be passed through the urethra into the bladder. Under chloroform anesthesia numerous attempts were made to enter the prostatic urethra with a variety of sounds and catheters, but all were unsuccessful. A sound was then passed as far as the obstruction, a median perineal section made and the urethra opened. It was then found that the prostatic urethra was obliterated. The suprapubic wound was enlarged and retrograde sounding attempted, but it was not successful. With a finger in the perineal wound and a finger in the bladder, what appeared to be the internal opening of the urethra was palpated. The bladder was then opened at this point through the perineal incision and a large drainage tube introduced.

For a few weeks the man was able to hold his water several hours at night and had only dribbling during the day. Later, however, the incontinence became complete and he was obliged to carry a urinal. This, however, was only necessary for a short time. Soon the man was able to hold his water four hours at night, and an hour and a half during the day. Further improvement is, we believe, to be expected.

An error was certainly made in not passing sounds at regular intervals after the fourth week. Had this been done we would not have been compelled to perform a perineal section and to have its unpleasant sequelæ.

CASE 4.—S. S., 63 years old, was referred to me by Dr. S. Breitenfeld. The man had had diabetes for several years, at times as much as 1.5 per cent. of glucose was present.

Five days before the operation, on rising in the morning, the man was surprised to find that he was unable to urinate. Dr. Breitenfeld was compelled to catheterize him regularly until I saw him, four days after the onset of the retention. Catheterization was very painful and was followed by a little bleeding. Rectal examination revealed a very large tender prostate. On the day of operation the urine was acid, sp. gr. 1034, containing a trace of albumin, 1 per cent. glucose, and many red blood cells.

Operation.—Under laughing gas anesthesia on Sept. 4, 1903, I made a median suprapubic incision down to the distended bladder. It was not deemed necessary to prolong the anesthesia by catheterizing and washing out the bladder, as the man had been given urotropin for several days. Moreover, on account of the marked diabetes the attempt was made to shorten the time of narcosis to a minimum. Accordingly, the bladder was incised and emptied of urine. The bladder mucous membrane and capsule of the prostate were incised just enough to admit a finger. The entire prostate was then rapidly shelled out in one piece. A rubber tube was inserted into the bladder and a strip of gauze packed around it. No sutures were employed, but the wound was strapped with plaster. The entire operation lasted eight minutes. The man was fully awake before he left the table. The gland was as large as an orange, soft in consistency and the prostatic urethra passed through it near its anterior surface.

An hour after operation there was free oozing from the bladder. The tube was removed, and the bladder wound firmly packed with gauze. Three days later the packings were removed and a tube inserted into the bladder.

During the first three weeks as much as eight-tenths of 1 per cent. of glucose was frequently found in the urine. The man was put on a strict diet, and the glucose disappeared for two weeks, only to reappear again after he went to his home. Sounds were passed at regular intervals in spite of the fact that they occasioned several attacks of mild orchitis. The suprapubic wound healed slowly but steadily, and the patient was able to go home with a small suprapubic sinus, on Oct. 21, 1903. After leaving the hospital glucose reappeared in considerable amount in the urine, and very likely delayed the healing of the sinus. The man was again put on a strict diet, but the glucose persisted, although in smaller amounts. However, the wound finally closed completely two months after the patient left the hospital. He then still had glucose in the urine, but his general condition was good. He could hold his water two and a half hours during the day, and six hours during the night. There was only a dram of residual urine.

Considering the fact that this patient was 63 years old, that he had a marked diabetes of several years' standing, the result is, we believe, a gratifying one. Many surgeons still refuse to do prostatectomy in diabetic cases. They are probably right in refusing to do a perineal prostatectomy, which would necessitate the giving of ether or chloroform for three-quarters of an hour or longer. But surely such patients can stand laughing gas for ten or fifteen minutes. It was just for such patients that I first thought of using the gas, I have found it very satisfactory. Few, indeed, even of the old diabetic prostatics, are unable to stand a short nitrous oxid anesthesia.

CASE 5.—M. L. M., 75 years old, referred by Dr. Henry S. Stark. In 1902 he suffered for two months from frequent and painful urination. Following this attack he was no longer able to pass his water, and thereafter had been catheterizing himself four or five times daily. During this time he had had frequent attacks of cystitis and orchitis. During the five days prior to his admission to the hospital the patient had an unusually severe attack of cystitis. He had a chill every day, accompanied by fever, anorexia, irregular pulse and a marked general depression. The urine withdrawn from the bladder contained large amounts of pus, and the catheter had to be passed every two hours. I was asked to see the man, not with the view of operating on him, as he was considered to be beyond the hope of cure, but simply to satisfy the relatives.

By rectum, the prostate was found considerably enlarged. The urine contained a large amount of pus. The temperature was 102 F., and the pulse 104. The man's desperate condition precluded a radical operation. At the same time it was evident that if something were not done promptly he would die of sepsis. Suprapubic cystostomy was offered and accepted as a palliative procedure.

Operation.—Sept. 15, 1903, under cocain and laughing gas, this operation was carried out. Three days later the man was allowed to sit up for an hour. His temperature became normal, the pus gradually disappeared from the urine, and his general condition improved materially. We were then confronted with the problem as to whether anything further could or should be done. In spite of his seventy-five years the man was still attending to his affairs, which necessitated his being out most of the day. As long as the enlarged prostate was present the suprapubic opening could not be expected to heal. Even if it could have been closed the man would have again been compelled to resort to the continuous

use of the catheter, and he would have soon been septic again. After careful consideration, and with the concurrence of Dr. Stark, it was decided to do a prostatectomy under laughing gas, through the suprapubic incision which had already been made. This was done eleven days after the preliminary operation. The former incision was enlarged a little by incising the fascia. The prostate was found firmly adherent to its capsule and required considerable force for its removal. A firm gauze packing was left in the bladder. The operation consumed eight minutes, and was accompanied by very little bleeding. The tumor consisted of two lateral lobes, each the size of a small plum, and about an inch of the urethra ran through the gland.

Three days after the second operation the patient developed a bronchopneumonia of moderate severity. He was delirious for several days, but his pulse remained good throughout. In ten days the temperature was again normal. Thereafter the convalescence was rapid and uninterrupted.

Oct. 30, 1903, the man returned to his home in excellent general condition, with a small suprapubic sinus. This healed very soon. Four months after operation the patient had gained 35 pounds; he was able to hold his water over four hours during the day and six hours at night, and there was absolutely no residual urine.

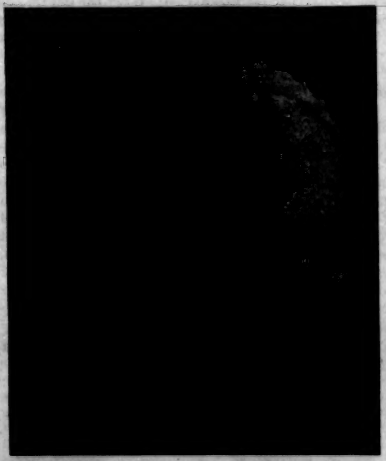


Fig. 2.—Case 4. Natural size. Urethra runs through anterior portion of prostate.

Fig. 3.—Case 6. Natural size. Two enormous lateral lobes.

This is the most striking case of the series. No one, we think, will deny that a perineal operation under ether or chloroform would have promptly brought about the death of the patient.

CASE 6.—A. M. R., 72 years old, was referred to me by Dr. Joseph Anderson. In 1897 he began to notice increased frequency of urination, both diurnal and nocturnal. This frequency of urination gradually increased until he was compelled to pass his water every hour and a half or two hours during the day, and five or six times during the night. Five days before his admission to the hospital the patient suddenly found that he was unable to pass any water. Repeated attempts to introduce a soft rubber catheter were unsuccessful. The writer saw the patient for the first time two days before operation, in consultation with Dr. Anderson. The bladder extended upward to a point about midway between the umbilicus and the free border of the ribs. On introducing a Mercier catheter it was obstructed at the prostate, and there was some bleeding. On introducing the finger into the rectum the prostate was readily felt enlarged to about the size of an orange. After some difficulty the catheter entered the bladder, and about three quarts of bloody urine were withdrawn. The patient's general condition was fair, but his sensorium was not quite clear, and he had a persistent singultus of three days' standing. The singultus and the retention of urine had appeared simultaneously. On the day following the catheterization the man entered the hospital. He had been unable to pass any water, and the singultus was still an annoying symptom. His sensorium, however, was more clear. The urine was found to contain a large amount of blood, but no evidences of nephritis were found.

Operation.—Two days after I had first seen him, Jan. 22, 1904, operation was performed under laughing gas. During the five days prior to operation urotropin had been freely administered. Without any previous catheterization a median suprapubic incision was made down to the distended bladder. On palpating the interior of the bladder eight or nine calculi, several of them with irregular projections, were found and removed. With long curved scissors a small incision was made over the most prominent portion of the prostate. The entire gland was then shelled out in the usual manner, and a packing inserted into the bladder. No sutures were used. The patient lost less than two ounces of blood. The entire operation, from the time the knife was taken in hand until the packing was introduced into the bladder, took exactly six minutes. During part of this time, owing to the fact that the man became excessively blue, no laughing gas was given. Before he left the table he was fully awake. He assured me that he had felt nothing of the operation, and only complained of some discomfort in the rectum. He had been given a quarter of a grain of morphin hypodermically a half-hour before the operation. Singultus ceased on the fourth day and on the sixth day the man was allowed to leave his bed. Two days later he was allowed to walk about his room.

February 23 the sinus was cauterized with the Paquelin cautery. On the following day the man began to urinate voluntarily, and thereafter very little urine escaped through the wound, which was soon completely healed. The very much distended and weakened bladder probably delayed the convalescence somewhat in this case.

CONCLUSIONS.

The foregoing cases we believe justify the following conclusions:

1. Suprapubic prostatectomy can be rapidly and safely performed under laughing gas.

2. Any patient who can stand laughing gas for ten or twelve minutes can have the operation performed.

3. Old age, diabetes and cystitis are no contraindications.

4. All of the contraindications usually mentioned are contraindications not for the operation but for the administration of ether or chloroform.

The value of laughing gas and of rapid work in these old prostatic cases can not be overestimated. These two factors are, we believe, the keystone to success in suprapubic prostatectomy. Few, indeed, are the patients, even though 80 years of age, or suffering from diabetes or sepsis, that can not be entirely cured. So we are now enabled to offer these poor old men an almost certain promise of a complete cure by an operation that can be done without ether or chloroform, that rarely takes more than twelve minutes to perform, and last, but not least, an operation that has a mortality of but 4 per cent.

1001 Madison Avenue.

NOTE.—Since writing the above paper I have performed prostatectomy under nitrous oxid on a seventh case. Mr. M., 75 years old, was suddenly unable to pass any urine on April 4, 1904. Attempts at catheterization were followed by considerable bleeding. April 7 I was asked to see the man by Dr. Dinkelspiel. The bladder was distended by urine and blood clots and could not be thoroughly emptied. Accordingly I performed suprapubic cystotomy under gas and removed a handful of clots. Eight days later, through the same incision, I removed the prostate under gas in less than two minutes. The prostate was as large as a lemon and was traversed by the prostatic urethra. The man is making a satisfactory recovery.

THE MEDICAL PROFESSION

IN THE PUBLIC AND PRIVATE LIFE OF AMERICA.*

CHARLES A. L. REED, A.M., M.D.
CINCINNATI.

The delivery of an address before the Army Medical School, while a pleasant distinction for which I am grateful to the surgeon general, involves, nevertheless, a responsibility that I approach with conscious diffidence. This feeling of trepidation arises, in part at least, from the fact that, as a professional man engaged however, in civil practice, I find myself surrounded by new conditions that are provocative of new thoughts and suggestive of new problems. Thus, for instance, there comes quite naturally to my mind the thought that the medical profession, wherever taught, avowed or practiced, presents the phenomena of a certain unity, a certain solidarity; but that, as exemplified, respectively, in public and private, military and civil practice, it presents important variations, and finally, that the causes of the variations and the reciprocal relations of the variants must be matters of interesting if not important consideration. This same train of thought, probably in obedience to the law governing the association of ideas, leads to the conjecture that what may be true of one profession may be true, to an important degree, of other professions represented in the national services.

A QUESTION OF DEFINITIONS.

In approaching this subject it is well, however, to remember, among other things, that this is a day of social evolution; that the changes incident to which come with almost revolutionary rapidity; that these changes are characterized, conspicuously, by the segregation of the people into classes or groups, more or less distinct; that many of these classes, or groups, without reference to being learned or otherwise, designate themselves as professions; and that this process has gained popular recognition and official sanction until, as a consequence, it is no longer possible for us to restrict the use of the word "profession" to the original learned callings of law, medicine and theology. On the contrary, we are forced to accept the conventional definition that a profession is "specifically a vocation in which a professed knowledge of some department of science or learning is used by its personal application to affairs of others, either in advising, guiding or teaching them, or in serving their interest or welfare by the practice of an art founded on it."

If, however, it is necessary for us to get new and accurate bearings about the word "profession," it is even more important that we understand what is implied by the "public life" or the "public services," or, more to our own present purposes, the "national services." In general terms, "public services" represent the more or less specific or classified activities demanded by the community without reference to territorial limitations, and paid for either in money, honor or abuse. These services may be restricted to the town, county, state or nation, to the last of which, as represented in the coordinate branches, legislative, judicial and executive of the government, these observations shall be restricted.

If, then, as already indicated, professions have become multiplied, and if we are to study them as represented in the national services, it may be well, by way of preliminary survey, to glance at the number of callings that come within the range of our definitions, representatives of which are to be found enrolled on the official register. I confess search is a little difficult and the result is a little surprising. Of course, law, medicine and theology, the parent professions, like the poor, are always with us, and are liable to remain so long as men violate the laws, national and statutory, and thus destroy their present happiness and jeopardize their prospects of eternal bliss. But, in addition, not to pause with the useful and recognized classes of dentists, veterinarians and nurses, there are physiologists, pathologists, paleantologists and pomologists; educators, engravers, entomologists and engineers, civil and uncivil; botanists, biologists and bibliographers; chemists, climatologists and cartographers; architects, accountants and one lonesome solitary agrostologist. Many of these, like the specialty of grasses, are represented by but one, or at most a very few individuals, a circumstance which makes a detailed consideration of each quite impracticable in this connection. We may, however, with propriety, discuss the original learned professions as the most conspicuous examples, and study their relations to the different branches of the government. Thus, to begin with the law-making power, we find, as nearly as can be ascertained from the Congressional Directory[1] that, of the 475 members of both branches of the Congress, the politicians form a solitary and innocent group of but 7 members, while there are 322 lawyers, 2 physicians, and not a single preacher among them. It would seem, therefore, either that it takes a tremendous lot of law to hold seven politicians straight, or else that the

* An address delivered at the annual commencement of the Army Medical School, Washington, D. C., April 5, 1904.

1. The biographical sketches in the Congressional Directory indicate the following composition of the respective branches of the Congress: *Senate*—Lawyers, 53; physicians, 2; merchants, 0; farmers, 1; bankers, 2; politicians, 1; miscellaneous, 22. *House*—Lawyers, 269; merchants, 0; farmers, 11; editors, 10; bankers, 0; politicians, 6; teachers, 5; miscellaneous, 76.

electorate, seeing how everything is hopelessly given over to the law, has—quite inconsiderately, I protest—sent its representatives to Washington with small care for their bodies and none for their souls.

The personnel of the judicial branch is, naturally enough, made up exclusively of representatives of the legal profession. The various services of the executive departments, however, represent practically every variety of professional employment. There are lawyers, physicians and surgeons, clergymen, dentists, engineers and others, the statistics concerning whom I have ascertained, on inquiry, have not yet been compiled. These professional men, whatever their number, are, however, the representatives in public life of professions which, according to the last census, numbered, respectively, in the United States, 114,703 lawyers, 133,225 physicians and surgeons 111,942 clergymen, 29,683 dentists, 57,975 engineers, of whom 43,538 were classified as "civil" and 14,440 as "mechanical and electrical," making a total of 446,528 persons represented in the five professions.

INTERESTS INVOLVED.

These aggregates are presented to show the magnitude of the interests that are, to an important degree, influenced by the representatives of the respective professions in the various services. This influence is very much more real and far-reaching than may be inferred without a careful consideration of the subject. In the first place, professional service rendered the government is the most conspicuous service of its kind that can be rendered to society; if it is efficient the science which it represents is advanced in public esteem; if it is inefficient the entire profession for which it stands is to that extent discredited. It follows, therefore, that professional service to the government is fraught with responsibility, not only for the trust immediately reposed on it, but for the even greater, although indirect, trust represented in the welfare of the profession thus brought to the bar of public opinion. I venture the assertion that it is this consideration, second only to the motives of patriotism and altruism, that prompts the professions—and I now speak more particularly of the medical profession—to approve of the severity of examinations which raises, at least, a presumption of efficiency on the part of those finally selected for the services. Or, to take another example, if a given profession were to accept from the government a lower compensation than that paid to other professions invested with similar responsibilities, the precedent would tend, relatively, to cheapen that profession in private life. The same principle holds true when one profession is denied rank, position or social prerogatives accorded to other professions of similar educational and social antecedents. It follows, therefore, that the professions in private life have a direct personal interest—an interest more practical if not more real than that prompted even by *l'esprit du corps*—in all that affects efficiency of their confrères in public life.

INFLUENCES TO BE CONSIDERED.

Among the influences thus to be taken into account, none, possibly, is of more importance than that of tenure. This, of course, varies in the different branches of the government, elective offices being held for specific periods, while appointive ones are of variable tenure, an increasing tendency being manifested to increase the number of life holdings. The merits of the two systems have long been and still remain subjects of inquiry. There is no doubt that the superiority of the national judiciary, appointed for life, over the state judiciary, elected for definite periods, has been the one influence most largely responsible for the present strong sentiment in favor of life tenure. The excellent results that have been realised through the workings of the Civil Service Commission, such, for instance, as the extension of life tenure to the classified offices, is another salutary influence that accounts, in large measure, for the present high efficiency in our executive services. The fact that a public servant, especially one that is invested with either judicial or executive duties assured of his career, is placed beyond both the whims of the boss and the caprice of the populace, raises a presumption in favor of the faithfulness and disinterestedness of his labors. While this is true, and while I have not the least disposition to question the value of reforms that have taken place and that are still in progress, relative to tenure, I can not ignore certain facts and tendencies which may be said to comprise the other side of the question. Thus life tenure, with promotion based entirely on time service, takes away the stimulus of necessity, and has a tendency to render the discharge of duty more or less perfunctory. There are men, and women, too, for that matter, to whom no greater misfortune can befall than that of an assured future. With them hope becomes circumscribed by regulations, and ambition becomes paralyzed by the certainty of conditions. This tendency, if it were to become dominant, as I am gratified to believe that it is not, would, in the course of logical development, make society the victim of the joint evils of bureaucracy and parasitism. Another tendency, however—one manifested proportionately to the completeness of the individual's devotion to his public duties—is his increasing incapacity to meet the requirements of a private career. It may be asserted that with ten or fifteen years' experience in the medical service of either the Army or the Navy, the individual, whatever his technical qualifications, if he attempts to return to private practice, will find himself seriously handicapped by unfamiliarity with those social and quasi-political influences that largely determine success. I am advised that the same is true to an extent of lawyers, who have learned to rely on a paymaster rather than a clientele. This represents no loss, however, to the energy of the community if the change in the individual amounts simply in his completer adjustment to the circumstances and requirements of a public career. If, however, they imply loss of interest in prescribed duties and loss of hope in private life and result in attempts to seek refuge in vicious indulgences, the loss is a double one. The greatest loss that a professional man can sustain is the loss of enthusiasm in his profession, while the greatest loss that a community can sustain is the loss of the productive energy of its members. Fortunately, however, such losses as these, I am persuaded, are sustained through the public services only in individual instances. And I have mentioned them here only to emphasize the existence of tendencies on which they are based, tendencies that, in a certain sense, have logical beginnings and equally logical endings.

REMEDIAL MEASURES.

Correct, however, as may be a diagnosis, it is of small value unless it leads to the adoption of curative measures for the present and preventive measures for the future. When this phase of the question is taken up one is at once brought face to face with the personal element in the equation, an element that can never be ignored. Nothing can come out of a man that is not in him, be

it good or evil, and one or the other will come out of him, according as it preponderates in him. Yet no man is wholly bad, and there is none who is not responsible to an important degree to the stimuli of ambition and hope. Ambition makes him amenable to the *esprit du corps* of his service, which, if high, lifts him to the higher levels of endeavor, but which, if low, will only encourage the development of besetting tendencies.

In addition to this it would seem important that those in authority should give to their subordinates the fullest opportunity for the development of individualism, consistent with efficiently ordered discipline; for the strength of any service can best be promoted by promoting the strength of its individual units. Not only is it important to promote individualism, as shown by power of initiative, always, of course, under necessary restriction, but it is almost equally important to concede opportunities for individual reputation. There are few men, I fancy, in the services who do not possess, in some degree, that weakness known as the love of approbation, and if there is such an one he ought to be expelled as an unsafe member of the corps. It is, however, important to discriminate between the intelligent appreciation of those whose approval is worth having and the ephemeral praise of the multitudes who, unthinkingly applaud to-day and cruelly forget to-morrow. That form of approval, however, which finds expression in promotion for cause, is of the most wholesome sort, while the reverse rule—that of degradation or dismissal, equally for cause—can not but be a corrective agency of great value to those who are not appreciative of good fortune.

POST-GRADUATE INSTRUCTION.

Important as are these influences, they do not, however, have a direct bearing on the fact that, in spite of increasing experience, there is a tendency to grow unfamiliar, if not actually to forget, much that ought to be kept well in mind. This fact has been recognized by both the Army and Navy in the establishment of special service schools. These institutions—such as the Artillery School at Fort Monroe, the Engineer School of Application at Washington, the School of Submarine Defense at Fort Totten, the School of Application for Cavalry and Field Artillery at Fort Riley, the General Service and Staff College at Fort Leavenworth, and the War College at Washington—are intended for advanced technical instruction for the strictly military profession, while the Army Medical School at Washington is designed to give similarly advanced and special instruction for members of the Medical Corps. Similar institutions exist in the Navy. So far as these institutions relate to medicine, they tend to confirm the fact, already extensively recognized, that military medicine is a distinct specialty of the healing art. This is manifested in the curriculum presented by General Orders, which embraces the topics of (*a*) the duties of medical officers in war and peace; (*b*) military surgery, the care of wounded in time of war and hospital administration; (*c*) military hygiene; (*d*) military medicine; (*e*) microscopy, sanitary and clinical, pathologic histology, bacteriology and urinology; (*f*) hospital corps drill and first aid to the wounded.

SCOPE, POSSIBILITIES AND NECESSITIES OF THE ARMY MEDICAL SCHOOL.

A mere glance at the foregoing subjects shows that the essential object of the Army Medical School is to adapt medical science to the requirements of military life. The necessity for such a course of study becomes apparent when it is remembered that the curricula prescribed in the medical schools of the country do not, and in the nature of things ought not, to embrace the highly specialized subjects that relate, almost exclusively, to military practice. Such studies are, however, essential for the regular Medical Corps. But when it is remembered that, in times of war, the regular Medical Corps, numerically considered, is totally inadequate to meet the requirements of the service, and that, at such trying moments, it is necessary to rely on the medical officers of the National Guard and on volunteer and contract surgeons, the scope and possibilities of the Army Medical School, for the proper education of this auxiliary medical service, becomes apparent. Its usefulness would be still further increased if the bill for the reorganization of the Army Medical Service, creating a reserve medical corps, were to become a law. To meet these requirements—to meet even the existing requirements, however—it is simply essential that the Medical Department shall be provided with a large central hospital, strictly up to date, to serve as a clinical school for medical officers and as a training school, alike for the Hospital Corps and the Nursing Corps. A failure by the Congress to provide this means of instruction is simply a blow at the medical service, the efficiency of which is essential to the efficiency of the Army itself. Such a failure, when viewed in the light of the expenditure of millions on millions of the public money for the construction of unnecessary postoffices in unheard-of towns, and for the alleged improvement of tideless streams, is a species of culpability for which each participant ought to be held to strict account by his constituents.

MEANS OF RECRUITING PROFESSIONAL RANKS IN THE NATIONAL SERVICES.

The professions as represented in the national services are variously recruited. Thus, in the legislative branch, they are elected; in the judicial they are appointed, without examination, while in the executive department they are appointed, some with, some without, examination. Whatever may be the method of selection, the new incumbents are drawn directly from the ranks of their profession in private life. I wish to emphasize the word "directly," for it is important, as implying that men thus selected pass, for the most part without intermediate training or experience, from private into public practice. Such a transition, whether in law or medicine, is too sudden to enable the individual properly to adjust himself to the requirements of his new station. It thus becomes apparent that, in every branch of governmental employment of a professional character, some provision, whether by a system of promotions or by the organization of reserve corps, ought to be devised as a safeguard to the efficiency of the service. This is especially true of the Medical Corps, which, at such times as our last two wars, was forced to rely on men who, without reference to their scientific attainments, had never been taught to appreciate nor drilled to meet the peculiar requirements of the service. But, without reference to war emergencies, it would be a vast improvement over the present contract system to create a reserve corps, consisting of men, appointed on examinations, who, although not in the service, would be eligible to the Army Medical School, and who, by other means, would be giving serious study to the duties of the army surgeon.

THE QUESTION OF STATUS.

The status of such a reserve corps, whether in the Army, the Navy, or the Public Health and Marine-Hospital Service, or whether relating to professions other than the medical, should be made definite and need not, in the least, interfere with the status of any corresponding services, as at present organized. As I have already stated, the present status, particularly in the three services just mentioned, is rendered definite by regulations. These regulations, to the informed and impartial mind, are, in many instances, neither wise nor just. They, however, who have accepted service under them must expect to abide by their provisions. I do not mean to imply by this that men, affected by unjust rules, ought not to attempt, by prescribed and lawful means, to remedy the evil. It can readily be understood, however, that if everybody connected with the public services were to attempt, by one means or another, to change existing conditions, the executive would be besieged, the Congress would be overwhelmed, and endless confusion would result. It was doubtless conditions leading to precisely such a state of affairs that prompted the general order, by which officers and employes of the government were forbidden, under pain of dismissal, to attempt, directly or indirectly, personally or through associations, to promote their own interests.

GENERAL ORDERS NO. 18.

HEADQUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
WASHINGTON, Feb. 19, 1902.

The following has been received from the War Department:

WAR DEPARTMENT, WASHINGTON, Feb. 19, 1902.

The following Executive Order has been received from the White House and is published for the information and guidance of all concerned:

EXECUTIVE ORDER.

All officers and employes of the United States of every description serving in or under any of the Executive Departments and whether so serving in or out of Washington, are hereby forbidden, either directly or indirectly, individually or through associations, to solicit an increase of pay or to influence or attempt to influence in their own interest any other legislation whatever, either before Congress or its committees, or in any way save through the heads of departments in or under which they serve, on penalty of dismissal from the government service. THEODORE ROOSEVELT.

White House, Jan. 31, 1902.

At the same time special attention of the officers of the Army is called to the following existing provision of the Army Regulations:

"Efforts to influence legislation affecting the Army, or to procure personal favor or consideration, should never be made except through regular military channels; the adoption of any other method by any officer or enlisted man, will be noted in the military record of those concerned." (PAR. 5, A. R.)

ELIHU ROOT, Secretary of War.

By Command of Lieutenant-General Miles:

H. C. CORBIN, Adjutant General, Major General U. S. Army.

DUTIES OF THE PROFESSION IN PRIVATE LIFE TO THEIR PUBLIC CONFRERES.

While the position thus assumed is, unquestionably, justifiable from a governmental or disciplinary standpoint, there remains, however, another and very serious side to the question. It must be remembered, as I have already intimated, that the professions in the public services are, primarily and essentially, the representatives of the corresponding professions in private life; that the status of the professions in the public services, relative to other professions, persons and classes, will and must be recognized as a criterion of the relative status of the corresponding professions in private life; and that, consequently, the professions in private life, jealous alike of their positions and their prerogatives, must see to it that neither are compromised through precedents established either for or by their public representatives. Recognizing, as has been shown, that the hands of their public confrères are tied by executive restriction, it becomes the duty of the respective professions, in their organized capacity, to take the initiative in correcting any influences which, in a reflex way, may act detrimentally on their own welfare, whether in public or private capacity. When such action can be coupled with unquestionable considerations for the public good, the obligation becomes doubly imperative. But, aside from the altruistic motive, and as a complete justification for intervention, it is to be remembered—and in effect I again repeat myself—that this is an age characterized by the rapid evolution of social groups and classes; that these groups and classes are already jostling each other for place; and that, consequently, that group or class, or, more specifically, that profession must be vigilant and courageous that would guard its prerogatives and conserve its status in a democracy presumably founded on the principle of equality.

Such intervention ought to be undertaken only after careful consideration of all the interests involved. Care should be taken to avoid the tendency to consider the view point of a given profession as the only view point in the case. Representations should be made, whether to the legislative or the executive departments, always with profound respect for the intention of those in authority to conserve all the interests placed in their hands, but with the feeling, the assurance, that the view point of the legislator or of the executive may not be the only view point in the case. Thus, to illustrate, it would seem that a given profession would be justified in making respectful representations to the heads of executive departments when its representatives in the services are placed in positions of responsibility, without authority to control or determine results; or, when final judgment is passed on the technical knowledge it represents by those who are ignorant of the subject; or when it is ignored in the composition of commissions of mixed membership, dealing in a large way with the practical application of the art and sciences for which it stands; or when it is excluded from consultative bodies on which its skill and position would, naturally, entitle it to representation; or when its technical qualifications are permitted to act as a *bar sinister* to its preferment in any capacity to which its general attainments entitle it to consideration.

In the legislative field, however, the duty of the professions to themselves and to the public are even more distinct. To begin with, each profession owes it to itself to be adequately represented in all legislative bodies, state and national. No profession can complain if it is the victim of inimical legislation, passed during absence from these posts of duty. On the other hand, the professions owe to themselves and to the people certain self-denials in the direction of legislative work. Thus, speaking now more particularly for the medical profession, laws relating to its status and efficiency in the public services, laws regulating the study and practice of medicine, laws relating to the public health, touching such questions as the sanitary reclamation of public lands, the protection of streams from pollution, the protection of interstate commerce from disease-producing agencies, quarantine, the prevention and management of epidemics, the manufacture of drugs, the purity of food and water supplies, need the attention of the medical profession in legislative bodies.

I have discussed these questions in this presence today, because this is conspicuously an institution identified with and representing the largest public interest of the medical profession. You, gentlemen, go forth today as specialists in military medicine. Your careers

in the medical schools, where you received your doctorate, your success in passing the rigorous entrance examinations in the Army Medical Service, the splendid records you have made as special students in this institution, commend you to the confidence of the secretary and to the esteem of your profession. The start you have thus made is accepted as a prophecy of achievements to follow actual labor in the field of your choice. Be assiduous; interest yourselves in original investigations; study the highest efficiency of your service, and in return I am authorised by the American Medical Association to vouchsafe to you the protecting influence of your great profession, whether duty shall place you in the favored spots of our mainland or shall send you to the far-away islands of the sea.

THE ARMY MEDICAL DEPARTMENT.

II.

A HISTORICAL SKETCH.

(*Continued from page 1217.*)

The Civil War was the first in which large armies made their appearance on American soil, and in these great army corps of volunteers many of the glorious traditions and hide-bound prejudices of the old Army disappeared along with its regiments and batteries. Yet it was none the less the leaven hid in three measures of meal, which leavened the whole lump, and this is true not less of the Medical Department than of the line.

On Jan. 1, 1861, the Army numbered 16,400 and the medical officers 115, or .7 per cent. of the whole—a considerably greater proportion, by the way, than exists to-day. Although by far the largest of the staff corps, it had the smallest proportion in the higher grades, and this also is still the case, with the single exception of the Signal Corps, the junior of all, whose handicap is perhaps a matter of inheritance, as its originator, Myer, was a medical officer.

The medical history of the Civil War marks an epoch in military sanitary organization even greater than was made in the art of war by Sheridan's use of cavalry or the hasty entrenchments of Lee. It is a glorious chapter of American history, but the full story of the ability and devotion of the surgeons of the Civil War, regular and volunteer, must be sought, not in the limits of an article, but by those who have industry and good eyesight, in the ponderous volumes of microscopic print which make up the "Medical and Surgical History of the Rebellion."

The idea of medical organizations in the field, drilled and trained to gather up the wounded from the battlefield, transport and care for them, developed by Larrey and Percy in the Napoleonic wars, had perished with the armies of the First Empire under the retroactive prejudices of the old monarchies, and the military taboo of even republican America forbade a physician to exercise the sacred function of "command" over trained enlisted assistants of his own department or even to have a permanent and unquestioned jurisdiction over the mules and drivers of the medical ambulances. He controlled in battle his own two hands, and these only, unless the colonel saw fit to give him the uncertain and doubtful assistance of the regimental band. The following letter taken from the files of the Surgeon-General's Office permits a glimpse of the tragedy behind the scenes:

SURGEON GENERAL'S OFFICE, Sept. 7, 1862.

HONORABLE EDWIN M. STANTON, Secretary of War.

Sir:—I have the honor to ask your attention to the frightful state of disorder existing in the arrangement for removing the wounded from the field of battle. The scarcity of *ambulances*, the want of organization, the drunkenness and incompetency of the drivers, the total absence of ambulance attendants are now working their legitimate results, results which I feel I have no right to keep from the knowledge of the department. The whole system should be under the charge of the Medical Department. An ambulance corps should be organized and set in instant operation. I have already laid before you a plan for such an organization, which I think covers the whole ground, but which I am sorry to find does not meet with the approval of the general-in-chief. I am not wedded to it. I only ask that *some* system may be adopted by which the removal of the sick from the field of battle may be speedily accomplished and the suffering to which they are now subjected be in future as far as possible avoided.

Up to this date six hundred wounded still remain on the battlefield in consequence of an insufficiency of ambulances and the want of a proper system for regulating their removal in the Army of Virginia. Many have died of starvation, many more will die in consequence of exhaustion, and all have endured torments which might have been avoided.

SURGEON JONATHAN LETTERMAN.
Medical Director Army of the Potomac 1862-1864.

I ask, sir, that you will give me your aid in this matter, that you will interpose to prevent a recurrence of such consequences as have followed the recent battle, consequences which will inevitably ensue on the next important engagement if nothing is done to obviate them. I am, sir, very respectfully,

Your obedient servant,
WILLIAM A. HAMMOND, Surgeon General.

Yet even this picture of the 600 men who had lain ten days on the battlefield of Second Bull Run could not bring the commanding general to lift the taboo and approve of enlisting men for the Medical Department. But while the Surgeon General was vainly struggling with the prejudices of General Halleck, light had

broken in another quarter. July 1, 1862, Surgeon Jonathan Letterman reported to General McClellan to be medical director of the Army of the Potomac. He was only 38 years old, having entered the service in 1849, and had just received his promotion to major. The Army of the Potomac was at this time crowded with sick and with the wounded of the seven days' fight, and in the retreat to Harrison's Landing most of the medical equipment and supplies had been lost or expended. In the course of a month he brought order out of this chaos, and at the same time drew up a plan for an ambulance corps—simple, far-reaching and effective—which General McClellan was quick to adopt. The personnel for this corps was obtained by transfers of officers and men from the line, and they, as well as the ambulances and other transportation, were placed entirely in the hands of the medical directors of the several army corps. A distinctive uniform and a simple drill were prescribed. This organization was announced in orders apparently without reference to Washington on August 2, and was soon followed by a scheme for regimental medical service and the establishment of division field hospitals in October. These taken together made a complete workable system, which at once made a new epoch in medical organization, and placed the Army of the Potomac far ahead of any military establishment in the world in this respect.

Meanwhile the system had its first trial at Antietam September 7, where the wounded of the Army Corps from the Army of the Potomac were promptly removed from the field and cared for, being in marked contrast with the experience of the wounded of the other wing made up of troops from Pope's army. In the bloody battle of Fredericksburg, where, in addition to the great number of wounded, was added the confusion of a defeat, the ambulance companies nevertheless did their work with smoothness and dispatch, and the wounded were transported without confusion or delay to the division field hospitals. As reported by Surgeon Charles O'Leary, medical director of the Sixth Corps, it "afforded the most pleasing contrast to what we had hitherto seen during the war."

This medical organization soon spread to the other armies of the United States, and was formally adopted by Congress in the spring of 1864. It was not copied from European models, but, on the contrary, has been, in its essential features, adopted by all civilized nations, and it is probable that the name and fame of Jonathan Letterman are better known to-day to the military surgeons of Europe than in his own country. Nor during his lifetime did this great and beneficent genius receive any promotion or any reward other than the commendation of his general and the admiration of his professional comrades. This splendid constructive work was done, and the vast responsibilities of chief medical officer of a great army were met and surmounted by a man who was given only the rank and pay of a major. When the Surgeon General proposed that the medical directors of the armies under McClellan and Halleck be given the temporary rank of colonel, which was enjoyed by other staff officers, the War Department returned the ungracious and fatuous reply: "Refused unless it can be shown that the skill and efficiency of surgeons are increased by an increase of rank and pay." This rank was afterward given to the medical directors of armies in the field by the Act of Feb. 23, 1865. It is not surprising that Letterman, broken in health by his great labors and disgusted at the blind ingratitude of those in authority, resigned from the service in December, 1864, and died in San Francisco some years later.

The Medical Department during the Civil War disbursed over $47,000,000, and cared for 1,057,423 sick in its general hospitals alone, without counting those that passed through the field and regimental hospitals. Of the medical staff, 115 were shot in battle, of whom 42 died, and 285 died of disease.

This great struggle has left behind it as monuments of the labors of the medical profession, the Army Medical Museum and the great national institution known as the library of the Surgeon-General's Office. The record of their professional work is given in the "Medical and Surgical History of the Rebellion," which, in spite of the advances in professional knowledge since that time, remains an inexhaustible mine of statistical information, while the reports of medical directors in the appendix are of permanent value and interest to all who are interested in the great and ever-recurrent problems of medico-military administration.

(To be continued.)

Clinical Reports.

GENERAL SYSTEMIC INFECTION BY THE DIPLOCOCCUS OF NEISSER COMPLICATING CHRONIC GONORRHEA.

THOMAS J. STRONG, M.D.
U. S. Army General Hospital of the Presidio.
SAN FRANCISCO.

A case is herewith presented of gonorrheal pyemia, which I believe is the first authenticated one in the history of this hospital. This case presents a peculiar feature, interesting and instructive from a clinical standpoint, in that the microscopic examination of smears, and the cultures, show a pure gonococcus infection.

Patient.—D. G. W., private, Company K, Eleventh Infantry, was admitted to this hospital, Jan. 15, 1904, complaining of pain and swelling in muscles of right side of neck, right arm, right leg, and left arm. No other symptoms were complained of, except slight temperature and coated tongue.

Previous History.—Had pertussis when a boy; had typhoid fever six years ago, which was of three months' duration and quite severe; had mumps five years ago, no complications; had measles at Fort McPherson, Ga., three years ago, and malaria in Philippines in 1902. From these diseases he fully recovered and was in good health when he enlisted.

Present Trouble.—In June, 1900, patient had a severe attack of gonorrhea, complicated by an epididymitis of the right side, which he says was cured after about two months' treatment, and also the discharge from urethra ceased. While en route from Manila, P. I., to San Francisco, the patient had intercourse at Nagasaki, Japan, but emphatically denies that he had any symptoms of gonorrhea, nor any inconvenience whatever until about two days before arrival at San Francisco, when he noticed pain and swelling of the muscles above-mentioned, namely: of the right sternomastoid, the right shoulder, the right thigh posteriorly, and left upper forearm. These localities were tender, red and swollen, but even at this time no discharge had been noticed from the urethra until the day he was admitted to this hospital.

Examination.—The day after admittance, Jan. 16, 1904, a circumscribed abscess was found, involving the extensor carpi ulnaris and extensor minimi digiti muscles at the upper part of the forearm, about one and one-half inches below the inner condyle of the humerus. Another abscess at the lower anterior border of the right sternomastoid muscle just underneath the latter. The right biceps was hard and indurated about its middle, and the flexor muscles of the thigh were in like condition. Some tenderness at the right shoulder just at the anterior border of the deltoid muscle.

Treatment.—These inflamed localities were carefully cleaned externally and wet dressings of bichlorid of mercury (1-2,000 solution) applied, and urethra was irrigated twice daily with protargol (solution 1 per cent.). January 21 the abscess of the left forearm was opened and about 45 c.c. of pus was evacuated. Two smears of this pus were taken for microscopic examination. The cavity was flushed with hot bichlorid solution, packed with iodoform gauze, and dressed antiseptically. The abscess at the border of the right sternomastoid muscle was opened at this time also, carefully cleaned out and packed with gauze.

Course.—On January 22 the swelling at the junction of the right deltoid and pectoralis major muscles had developed to such an extent that fluctuation was detected and it was promptly opened. A culture of the pus was made on blood serum, and the cavity flushed out and packed with iodoform gauze. As no more abscesses were in evidence, the patient was placed on light nutritious diet, bowels kept open by salines, and whiskey given every four hours. The pus from the last abscess, that of the shoulder, was also obtained on a cover glass and prepared for staining for microscopic examination. It showed innumerable gonococci and nothing else, the cocci being more plainly seen in this specimen than any previous ones. A blood count showed a marked leucocytosis: 26,000.

On January 24 the blood serum culture showed a typical growth of the gonococcus in yellowish isolated spots on the culture media.

The patient at this date, January 30, is improving daily, and gaining in weight. No further complications have been noticed, and by his own statements he feels better than he has for two years.

Comments.—It is highly probable that this case was one of pyemia of some duration, more or less latent until a new stimulus was awakened by the second infection acquired in Japan, and not fully developing until two or three weeks afterward.

Thanks are due Lieut. Chas. F. Craig, assistant surgeon, U. S. A., pathologist at this hospital, for the excellent demonstrations, microscopically and culturally, of the specimens of this case, and due credit is also given to Lieut. J. C. Gregory, assistant surgeon, U. S. A., who transferred the case to the writer with the suggestion that the abscesses might be due to gonorrhœa, as the patient had a discharge from urethra at the time he was transferred from a medical to the genito-urinary ward.

Patients having gonorrhœa, suddenly developing abscesses of the muscles, etc., or of internal organs with no other appreciable cause, may be suspected, with reason, of having a gonorrhœal pyæmia, but the diagnosis should be guarded until the condition is assured by a bacteriologic examination.

MULTIPLE CALCULI IN THE MALE URETHRA CAUSING OCCLUSION.

RAYMOND F. METCALFE, M.D.
First Lieutenant and Assistant Surgeon, U. S. Army.
MANILA, P. I.

History.—G. I., a Filipino male, aged 25 years, gave the following history: Eight years ago, while urinating, he was taken with a sudden, severe lancinating pain in the penis and along the entire course of the urethra. From that time he states that he was never free from pain, which was exaggerated by urination and at times an acute exacerbation would occur which would confine him to his bed. His urine was tinged with blood, and he passed it only twice in the twenty-four hours on account of the severe pain which it caused. One of these acute attacks occurred Dec. 2, 1903.

Examination.—December 5, I was called to see the patient by Contract-Surgeon Jones. The temperature was 102 F., pulse 110. The scrotum was greatly enlarged, dark and congested, the skin tense and shiny, with two small areas on the anterior surface showing signs of necrosis; the perineum was bulging. Midway between the scrotum and the anus, a little to the left of the median line, was the mouth of a fistula which was discharging urine mixed with pus. The patient was in great agony and could not stand the slightest pressure on the scrotum. He was removed to the hospital at once and anesthetized to allow thorough examination, and operation, if necessary, the appearance of the tissues suggesting extravasation of urine. The patient had been unable to pass urine except a few drops at a time, for several days. A silver catheter was tried and three inches from the meatus it grated against a substance like stone and would go no further. A filiform bougie was tried with the same result. A probe inserted in the fistula grated against the same object.

Operation.—With the patient in the lithotomy position, I made a perineal incision two inches long in the median line. As a guide could not be passed and as the tissues were edemic, the urethra was found with some difficulty. A hard mass could be distinctly felt to one side of the membranous urethra; an incision was made over this mass and an oval concretion, one and three-quarters inches by one inch and weighing twelve and one-half grams was removed. It was lodged in a saculated pouch formed by a dilatation of the urethra, and along the course of the urethra and posterior to the above were five other similar but smaller concretions with a combined weight of nineteen and one-half grams. Each stone was surrounded by a considerable amount of pus.

The stones, one-half actual size.

The wound was flushed and a catheter introduced into the bladder and about eight ounces of strong smelling urine removed. No stones could be detected in the bladder, so a catheter was introduced and left *in situ*, a siphon tube attached, and incision packed with gauze. Recovery was uneventful.

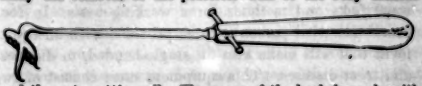
First Reserve Hospital.

New Instrument.

AN IMPROVED RETRACTOR FOR THE SO-CALLED RADICAL OPERATION ON THE MIDDLE EAR.

HUGO FREY, M.D.
Assistant to Professor Politzer.
VIENNA.

The instrument shown in the illustration has proved very useful to me in making a complete opening into the tympanic cavity—the so-called radical operation. It facilitates especially the removal of the posterior wall of the bony meatus



and the outer attic wall. The curve of the hook is made with reference to the anatomic configuration of the parts, so that it retains the membranous meatus close to the anterior walls of the bony canal; the lateral projections holding back the adjacent parts of the auricle.

In using the retractor, the handle should be kept in the direction of the patient's upper lip and somewhat higher than the front part of the instrument.

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SATURDAY, MAY 14, 1904.

THE LABORATORY METHOD OF INSTRUCTION.

According to the expressed views of many critics the history of medicine as a science, in contradistinction to an art, is not a long one. One of the greatest steps in securing progress in the science of medicine, it will be maintained, was the introduction into the curriculum of medical schools of laboratory instruction in place of much of the "word of mouth" instruction of the older days. Beginning with anatomy as the first laboratory course in nearly all cases, there have been added courses one by one, until practically every course is now a laboratory course, including the bedside clinic as perhaps the best sort of a laboratory. Even the dry-as-dust subject of osteology has taken on a new life with the introduction of courses in certain schools in which the student constructs a clay model of each bone as it is studied.

It is far from our purpose to attempt to discredit in any way this direction of progress, and we trust that we would have little sympathy if we did, for there is no possible question that both methods and results are far better than they were. But there is a limit to all things, and the best of methods may become faulty when overused. With all new principles one of the first difficulties is in finding how far it is to be applied. The problem in the case of this particular form of instruction is by no means a simple one; it is possible that in some instances the laboratory method of instruction has been overdone. As an ideal method of imparting useful information in a valuable way, giving at the same time the highest degree of mental training and the acquirement of practical working knowledge of the subject, there can be little question that laboratory instruction offers the best means at our disposal.

There is, however, one great drawback, the question of time. The problem may be reduced to this: We have as material a person of presumably good intelligence, with a certain amount of training that has provided him with some facts and methods for a working basis. In four years' time that person is to be provided with an equipment that will make him fit, single-handed, to diagnose and treat diseases. This equipment must consist of two things—facts and methods, and it would be difficult to estimate just the relative importance of each. Now it is perfectly certain that the score or more of subjects with which this person must become familiar can not possibly be considered exhaustively, and likewise each must be properly condensed with due regard to the relative importance of its fellows. It is here that the laboratory method leads into difficulties. Take, for example, physiology: Of the innumerable important facts of physiology there are few that are not proper subjects for laboratory demonstration, as they have nearly all been acquired in this way. For a proper understanding of the work that is to follow the student needs to know a very large proportion of these important facts, and there is no doubt that if he could develop each fact for himself in the laboratory he would be fitting himself splendidly; but to do this he would have to repeat to a large extent the entire history of physiology, a performance that would require for itself more than the entire four years assigned to the entire study of medicine. The same thing may be said of pharmacology, and for that matter every course in the curriculum.

Evidently, then, instruction must be given in two ways: in the laboratory, to introduce method, deductive powers, and manual training; in the class room, to present in compact form the necessary facts, and in this way to give to the student the results of the labors of his teachers, their colleagues, and their predecessors. The difficulty lies in the proper apportionment of the time of each course between these two sides. Because of the evident value of training afforded by the laboratory, its development of ideals and idealists, and because the teacher secures for himself the greatest benefits from the laboratory, there is often a tendency to have the student spend all or nearly all of his time in this sort of work. The result is that his knowledge of the subject as a whole is extremely meager, although he may have certain principles well established. We have known students from certain institutions whose whole conception of physiology seemed to lie in nerve-muscle preparations, while their ideas concerning metabolism were correspondingly deficient. The student from another school, on the other hand, having studied physiology under a physiologic chemist, will be found able to trace nitrogen most exactly from corned beef to urea, but hardly know the difference between a reflex arc and the cardiac systole. This sort of thing is far from uncommon, and is largely the result of putting too great stress on the laboratory and too little on the lecture and the recitation.

Another danger that we have noticed is that of leaving the student too much to himself. With the laudable object of permitting self-development, in many laboratories the student is given his material, a few printed directions, and left to his own devices. As a result he often spends many fruitless hours because of starting wrong, that might have been saved by a little guidance. We all learn most by making mistakes, and undoubtedly the student profits by his, but the time element enters in—he must get the facts somehow, and wasted time is wasted opportunity. Again, the long hours demanded by the laboratory leave too little time for the student to assimilate, to correlate, and in short, to think. Too

often the result is that he looks on his laboratory work as merely a set task, that is to be performed according to a certain set of directions, and that ought to yield certain results, while the principles involved he is very likely to overlook.

We would not be misunderstood. Laboratory methods of instruction have added vastly to the present and the future of medicine, as of all other sciences, and they will add yet more. But we believe that there is still an important accessory work, made necessary through the brevity of life, that must be performed in the class room, and that in some instances this has been lost sight of, or minimized, with unfortunate results.

PREVENTION OF PNEUMONIA.

One great fundamental principle of preventive medicine is to keep infection from spreading beyond the sick. This principle has long been recognized in the case of very contagious diseases, such as smallpox, measles, etc., and here the methods employed are as yet purely empirical. In recent times the same principle has been applied to other diseases, like tuberculosis, typhoid fever, cholera, dysentery, etc., and in these the practical methods employed are the direct outgrowth of scientific investigations. Thus no conscientious physician at the present time would release a convalescent typhoid patient from restraint so long as the urine contains typhoid bacilli.

Pneumonia appears to be one of the last of the great infectious diseases to be put under the full domination of the principles of prevention of further spread.

The frequency and fearful destructiveness of pneumonia make it absolutely imperative that much greater attention than heretofore must be given to problems connected with its prevention. Too long have we remained content with laying the responsibility for pneumonia at the door of atmospheric conditions of various kinds. While the problems of prevention in this case are complex and difficult, it must be acknowledged that various simple but nevertheless important precautions against the spread of pneumonia have not been carried out systematically, because careful consideration has not been given to this aspect of the disease.

It should be clearly understood that pneumonia—meaning, of course, acute lobar pneumonia—is a pneumococcus disease. If it were possible to destroy all pneumococci pneumonia would disappear. The etiology of pneumonia has been associated with several organisms, of which the pneumococcus was always given the first place as regards importance. Recent investigations show that pneumococci always are present in the blood during life in pneumonia. Thus in one hundred and thirty-two cases giving positive blood cultures during life, Rosenow[1] obtained only pneumococci. In the prevention of pneumonia special and particular attention must always be given to the pneumococcus as the specific causative agent.

Now the pneumococcus is an organism of variable virulence and viability. From laboratory experiments we know that virulence and viability are best preserved when the organism is grown on media containing hemoglobin, a condition furnished to a certain extent by the rusty sputum of pneumonia. We know further that when pneumococci are passed through one susceptible animal after another they soon reach an almost incredible virulence. For these reasons pneumococci in pneumonic sputum may be highly virulent for human beings. This may be the case also of pneumococci from cases of rhinitis, tonsillitis and bronchitis. Hence sputum from all pneumococcal affections of the respiratory tract, and especially pneumonic sputum, should always be treated as infectious. Small endemics of pneumonia and cases of so-called contact infection are no doubt often most readily explained as the result of dissemination of pneumonic sputum containing virulent pneumococci. To permit pneumonic or other infectious sputum to dry is, of course, in direct violation of the first principles of preventive medicine. Certainly the growing feeling that more complete isolation of pneumonic patients is desirable should be stimulated.

Whether all pneumonia can be traced to dissemination of pneumococci by way of sputum and otherwise, is, of course, at present a most difficult question, because we do not know the significance of the pneumococci generally stated to be present in the oral cavity of a large percentage of healthy individuals. Whence do these pneumococci come and how long do they stay? May such pneumococci give rise to pneumonia in their host, and if so, what are the special circumstances that favor such action? These are exceedingly important problems that offer rich fields for investigation. In the light of our present knowledge, however, sputum is the most fertile source of pneumococci that may have increased in virulence from residence within the human organism, and for this reason, as well as for others, the efforts to train humanity to more hygienic habits of expectoration must be vigorously continued.

1. Journal of Infectious Diseases, 1904, i, 280.

THE ACTION OF SALINE PURGATIVES AND DIURETICS.

Following his report[1] of last year on the action of certain saline purgatives, J. B. MacCallum has recently carried out some further researches[2] on these substances, and also on certain saline diuretics. It will be remembered that in his former communication MacCallum brought out several facts which greatly altered our conception of the action of saline purges. He showed that such purgatives act, not only when introduced through the intestinal tract, but also when introduced through the skin. He further pointed out that the purgative action of the salts was partly due to increased peris-

1. American Journal of Physiology, vol. x, No. 3.
2. University of California Publications, vol. i, Nos. 10, 13, 14.

talsis and partly to the increased secretion of fluid into the intestine, both of which processes he observed directly. He compared the action of these salts on the intestine to their action in producing nervous hypersensitiveness and muscular twitching in voluntary muscles, phenomena which Loeb's work has made well known. He likewise showed that the salts of calcium, which counteract the action of the purgative salts on voluntary muscles, have the same effect on intestinal muscle, and he suggested the possible usefulness of calcium salts in nervous diarrhea. He pointed out the dangers attending the use of the barium and magnesium salts, and the apparent harmlessness of the sodium salts.

In his latest work MacCallum has studied the effect of the same series of salts on loops of intestine completely isolated from the body. The object of this work was to study particularly the effect of the salts on the secretion of fluid into the lumen of the intestine. The results which were obtained were completely confirmatory of his first series of experiments. The salts which act as purgatives produce increased peristalsis in a loop of intestine removed from the body and placed in solutions of them, and in certain strengths they also cause the secretion into the intestinal lumen of a fluid resembling intestinal juice. In this set of experiments also the effect of the saline purges was neutralized by the calcium salts, which stopped the peristalsis and prevented the secretion. One practical point is suggested by MacCallum as the result of these experiments, and that is that the expulsion of saline enemata, which is so commonly seen and which is due to the peristalsis produced by the sodium chlorid, may be prevented by the addition of a small amount of calcium chlorid to the enema.

In his work on saline diuretics MacCallum used barium and sodium chlorid. He found that sodium chlorid produced a uniform increase in urinary secretion, which was greatly aided by the introduction of small quantities of barium chlorid into the blood. Larger quantities of barium chlorid caused suppression of urine, probably by causing intense contraction of the musculature of the urinary passages rather than by inhibiting secretion. Calcium salts inhibit the flow of the urine just as they inhibit intestinal action.

It would seem from this experimental work that the common factor underlying the action of saline substances as secretory and muscular stimulants, has been discovered, and accounts for the action of these substances on as different structures as the intestinal canal, the urinary tract and the salivary glands, which have as common elements muscular and secretory structures.

THE INTERSTITIAL GLANDS OF THE TESTICLE.

The importance of the internal secretion of the testicles in determining normal development has been recognized for a long time. Brown-Séquard especially emphasized the significance of testicular secretion on the general metabolism of the body. He claimed that the testicles secreted some substance that had a marvelous effect on the body, especially through the nervous system, in maintaining mental and physical vigor. He thought that the seminal fluid may be partly absorbed and taken into the blood, thus permeating the whole body and exerting a specific effect on the organism. Zoth and also Pregel[1] in 1896 appear to have obtained definite evidence of the property of testicular extract to diminish muscular and nervous fatigue resulting from work, and also to lessen subjective fatigue sensations.

In 1840 Leydig discovered between the seminiferous tubules of the testicle groups of cells, which are ordinarily known as interstitial cells. These cells have become well known through the later work of Kölliker, Hansemann, Lubarsch, Reinke and others. A great difference of opinion has arisen in regard to the origin and significance of these cells. Some think that they are the remains of the Wolffian body (Klein). Others think they have the same origin as the germinative cells of the seminiferous tubules, because of the resemblance of the pigment they produce to that of the germinative cells. Waldeyer thought they were plasma cells. The function of these cells is even a more obscure problem. Some attribute to them a trophic function for the seminal cells; others, again, have assumed, without furnishing any proof, that they produce an internal secretion.

Recently some very interesting and suggestive work tending to throw much light on this problem has been done by two French investigators, Angel and Bouin.[2] From their studies they conclude that these cells are glandular elements, giving all the cytologic indications of glandular activity and passing through the phases of a secretory cycle. For this reason they have proposed to call these cells the "interstitial glands" of the testicle. They have performed a number of animal experiments in order, if possible, to differentiate the functions of the various testicular elements. One testicle was removed, and the vas deferens on the opposite side ligated in a number of animals—rabbits, guinea-pigs and dogs. After six months the animals were killed and the testicles examined. They were small and soft. The seminiferous tubules were much degenerated and absent in places. The columns of Sertoli were nearly normal. The interstitial glands, however, were much hypertrophied, often being doubled in volume. Their blood supply was very abundant, and the cells showed signs of great cellular activity. The animals preserved their secondary sexual characteristics and genital activity. This would seem to be due to the interstitial glands of one side having undergone a compensatory hypertrophy, because of the removal of those of the opposite side, and therefore continuing the function of internal secretion. The seminal cells having degenerated, would not be associated with this function.

1. Pflüger's Archiv, vol. lxii, 1896.
2. Comptes Rendus de l'Acad. des Sciences, 1903-4.

In cryptorchids the sexual characteristics and genital activity are preserved, though no spermatozoa are formed. In these cases the interstitial glands are well developed between the tubules, while the spermatogenic cells of the tubules have disappeared. This is in complete harmony with the experimental evidence given above. When pieces of the vas deferens of young rabbits are resected, in some cases the animals remain small. The genitals are undeveloped, and they have no sexual instinct, resembling in this respect individuals castrated at a young age. The testicles are very small, and the seminiferous tubules retain their embryonic structure. The interstitial cells show marked deviation from the normal, and apparently have undergone a pigmentary degeneration.

These facts put together seem to indicate that the interstitial glands are especially concerned in controlling the development of the so-called secondary sexual characteristics of the male and in the production of testicular infantilism. This is probably done through the influence of an internal secretion, but this is entirely hypothetical.

THE "PATENT-MEDICINE" CURSE.

Under the above title, Mr. Edward Bok, editor of the *Ladies' Home Journal*, devotes a full page in the current issue of that periodical to the patent-medicine evil. He makes an appeal to the Woman's Christian Temperance Union actively to take up the fight against patent medicines on account of the alcohol they contain. While he recognizes that the alcohol curse is not the only bad feature of the evil, he evidently considers it one of the worst, and this is the main point of his article. He does not mince words, but states facts boldly and in a manner that is convincing. Since it appears in a journal with an immense circulation among women, who are more generally given to the patent-medicine habit than men, the article is certain to have a good effect, temporarily at least.

Bok prints a list of 36 different "patents" with the percentage of alcohol contained in each, as given by the state analyst of Massachusetts, and as published by us some time ago. He calls attention to the fact that the patent-medicine habit is one of the greatest curses with the most dangerous results that is inflicting our people, and that sooner or later they will be awakened to the dangers.

While this article only reiterates what has been printed time and again in medical journals, by appearing in a periodical of this nature it will stir up the other side. This it has already done. In the course of the article special reference is made to the wonderful (?) "Dr. Pierce's Favorite Prescription," and the analysis made by the German chemist, Hager, is published. As a result, the R. V. Pierce Company has brought suit against the publishers for $200,000 damages. It will be interesting if this suit can ever be brought to the courts, and if the manufacturers of the nostrum can be placed on the witness stand and compelled to tell what it does or does not contain. As *Harper's Weekly* says: "How much harm, or the contrary, the patent medicines do we do not know, but a serious fight against them is likely to bring it early to light that they are strongly entrenched, not only in the affections of the people, but of the newspapers, which derive from patent-medicine advertisements a revenue that in the aggregate must be enormous." It is here that the secret of the power of patent-medicine men lies. The power of the press of the country is back of it. While this issue of the *Ladies' Home Journal* has been out for three weeks, there has hardly been a newspaper reference to the article except that which refers to the Pierce suit. We may look for smoothly worded denials of the truth of this or that statement in Bok's article, for there will be a quiet but determined effort made to counteract it, and the newspapers will be used in that effective manner which the experienced press agent knows so well. Already such newspaper matter is appearing. In a paper before us is an interview with one of the officers of the Pierce Company in which it is stated, in that goody-goody way, that they are surprised that a reputable magazine would stoop to make such statements as the *Ladies' Home Journal* has made. We are told that this "favorite prescription" is composed of extracts of medicinal plants, roots and herbs which would "not harm the most delicate system."

The following is what Mr. Bok has to say about the relation of the medical profession to the patent-medicine evil:

> Let any woman who reads these words ask her physician as to the truth of the statements made here. Every intelligent physician knows that this article is decidedly within the truth, rather than beyond it. But the physician cannot speak of the patent-medicine curse unless he is asked, because, if he does, he lays himself open to the accusation that he is afraid of these "patent-medicine cures," since their use interferes with his practice. As a matter of fact, the more patent medicines that are used the better it is for the medical profession, since few things in the end bring a man or a woman or their child more surely to the physician than patent-medicine tippling. It is a curse to the patient, but a money-maker to the physician.

We can not resist the temptation to quote the following truths regarding religious journals:

> Yet in these very same so-called religious papers there are official Woman's Christian Temperance Union columns setting forth the "official" news of the organization and its branches. A pretty consistent picture do these two portions of the average religious paper present—advocating, with one hand, alcoholic prohibition, or temperance, and receiving, with the other hand, money for advertising—and thereby recommending to their readers—preparations filled ten times over with more alcohol than the beer which fills them with so much horror in the editorial columns! There are no papers published that are so flagrantly guilty of admitting to their columns the advertisements of not only alcohol-filled medicines, but preparations and cure-alls of the most flagrantly obscene nature, as the so-called religious papers of this country. Unable, owing to their small circulation, to obtain the advertising of discriminating advertisers, they are all too ready to accept the most obscene class of advertising—business which the aver-

age second-rate secular paper would hesitate or refuse to admit into its columns. I am speaking whereof I know in this matter. Beside me, as I write, lie issues of some twenty different "religious" weeklies, the advertising columns of which are a positive stench in the nostrils of decent self-respecting people. Let the Woman's Christian Temperance Union officers counsel its members who subscribe for these papers to compel their publishers to omit these advertisements, and if they refuse, let these people discontinue their patronage of the paper. Such measures would very quickly shut out from publicity the majority of these baneful patent medicines. There is vital, important work here for the Woman's Christian Temperance Union.

BIOLOGIC TEST OF MUMMIES BY SPECIFIC PRECIPITATION.

J. Meyer[1] has made the observation that extracts of muscular tissue of Egyptian mummies give positive results when mixed with precipitating serum of rabbits immunized with human serum. One of the mummies is said to be about five thousand years old. This result serves to establish that the biologic test is applicable to material several thousand years old. On this account it is suggested that this test may prove of value in the study of certain problems in anthropology at the same time as the theoretical and purely scientific interest in specific precipitation certainly increases as its range of applicability widens.

THE VETO OF THE ANTI-CORONER'S BILL IN NEW YORK

The mayor of Greater New York has exercised his prerogative in vetoing the Elsberg bill abolishing the coroner in that city. He objects to an innovation on a time-honored system, and claims that an institution which is the growth of a thousand years should not be destroyed unless it is proven that its substitute is more useful and will stand the test of time as well. There is a little fallacy in this that the mayor does not seem to want to recognize. His remarks would apply to any time-honored abuse that has been kept up through interested motives from time immemorial. The fact, moreover, that the medical examiner's plan is working satisfactorily, except, perhaps, to the politicians, in other states and cities is ignored. We have held a rather high opinion of Mayor McClellan's intelligence, and the belief to which we are forced is that his veto of the bill is to please a corrupt political element backing the opposition to the measure. This is not so complimentary a belief as it would be to presume that he was misled, but we regret to have to adopt it.

ANTE-MORTEM SECTION.

We are apparently passing through one of the irregular periodical revivals of the premature burial scare, as has been evidenced by various legislative attempts and newspaper articles. It is a little curious to observe how fearful some people are of being buried alive. They prefer to have their lives extinguished in the most cruel way to taking any chances on such an event. This tendency appears to be well illustrated by the will of the late Miss Frances Power Cobbe, one of the chief apostles of the antivivisection movement in Great Britain. This woman, of considerable literary distinction, it is reported, put in her will, as a condition on which the other provisions were dependent, that she should have her throat cut, including both the carotid arteries and the trachea, before burial. It is well to note[1] "that this operation could be of no advantage to anybody unless she were still alive." In fact, it was practically an instruction to contingent murder and as such should have been sufficient, we think, to invalidate the clause. It is reported that this ridiculously farcical performance was carried out.

1. Muench. med. Woch., 1904, April 12.

THE RELATION BETWEEN CHILBLAINS AND TUBERCULOSIS.

Though relatively frequent in the colder portions of this country, chilblains are usually so trivial in their effect that they receive home treatment and do not come under the notice of the practitioner. As is the case with many minor ailments, we are apt to regard them as having little or no significance, but a little reflection leads to the conclusion that as all individuals who are exposed to cold do not have chilblains there must be some underlying factor in those who suffer from them. Permin[2] has recently advanced the idea that there is an intimate association between tuberculosis and chilblains. Permin's conclusions are based on the study of the patients and attendants at a tuberculosis sanitarium. He found that 70 per cent. of the patients and 60 per cent. of the attendants had chilblains. All of the attendants who suffered were tuberculous or showed evidence of healed tuberculosis. Permin thinks that the lesion is due to the action of the tuberculous toxin on the skin.

EDDYISM AND LITERATURE.

In these days when literature, or at any rate fiction, is utilized as a propaganda for all varieties of art, science, politics and religion, and when the "Christian Science story" is recognized by publishers as appealing to a definite and presumably large constituency, it is encouraging to find that the spread of Mrs. Eddy's vagaries sometimes meets with a hearty rebuff in non-professional quarters. The *Atlantic Monthly* for April contains an analysis of Eddyism, which deserves to be widely read for its literary quality, as well as for its combination of clear exposition and pitiless logic. In the opinion of the author of this article, Eddyism not only "defies the canons of history," but may be shown in addition "to be specious philosophy, superficial science and a caricature on Christianity." The author then proceeds to enlarge on these four counts, and, while studiously preserving a judicial and discriminating attitude, mercilessly lays bare the scientific, metaphysical and historical absurdities of the dogma erected by Mrs. Eddy and her followers. There is no mincing of words: "... it is about as likely that the Great Unknown, casting about for a medium for his sanitary pronouncement, should have singled out this bungling prophetess, as that the immortal spirits, dead and not yet born,

1. Medical Press and Circular, April 20, 1904.
2. Zeitschrift für Tuberculose, vol. v. No. 5.

should find no more profitable occupation than strumming banjos for the delight of mediums too spiritually constituted to engage in honest work." All in all, this contribution will repay perusal.

SCHOOLBOY MOSQUITO BRIGADES.

In San Antonio, Texas, a campaign against the mosquito has been taken up in a rather peculiar way. The health officer of New Orleans, who has been manfully striving to overcome the difficulties in that city, was apparently forced to go out of the city to demonstrate what might be done. He gave lectures at Laredo, San Antonio, Houston and Galveston, and with the cooperation of the superintendent of the Board of Education of San Antonio has started a movement among the school children to fight the mosquito. We have heard of Mr. Sherlock Holmes' Baker street gang, to which he applied sometimes to search out important facts, using the street boys for his purpose. There is very little that escapes a live boy if his attention is called to it. Dr. Kohnke's demonstrations seem to have started the enthusiasm of the San Antonio schoolboys, and it is a wary wiggletail that is going to escape their attention, according to newspaper accounts. It is proposed to carry on the fight on the same plan in New Orleans, using the success of it in San Antonio as an evidence of what can be done elsewhere. We wish Dr. Kohnke success. Under properly regulated supervision, we can see no more successful mosquito brigade than one composed of thoroughly instructed schoolboys indulging their natural destructive tendencies in killing these pestilent insects.

A PRACTICAL RESULT OF ORGANIZATION.

Our attention has been called to the fact that there is at least one American life insurance company that appreciates the value of medical organization. Applicants for appointment as medical examiners to this company furnish their own references in the good old-fashioned way, but, in addition, every applicant is made to stand the test of professional fellowship. Is he a member of his county medical society? What does the secretary of the county medical society say about him? Every honorable physician can be a member of his local society, which society, without further effort on his part, makes him a member of the state medical association. Most physicians now avail themselves of this opportunity, while the unqualified remain outside. To the mind of the medical director the preliminary sifting has been done; there is no need to look for examiners outside the organization. Nowhere is a physician so well known as among his own associates. If they receive him into fellowship it is evident that he is not without character and educational attainment. The time is rapidly approaching, if, indeed, not already here, when the physician who is not a member of his county medical society need expect to receive none of the appointments of honor and profit that come to medical men. This is safe policy, because no longer may a qualified man be excluded from society benefits. Personal prejudice no longer serves to debar a reputable physician from the benefits of medical-society fellowship. The county medical society compels every applicant for professional fellowship to show that he is an honorable man and an educated physician, but it can not refuse admission to any physician in its territory who can thus demonstrate his fitness for membership. Therein lies the value of the society list to the corporation of whatever sort that seeks the professional services of a physician.

ANTISTREPTOCOCCUS SERUM IN SCARLET FEVER.

Not long ago Heubner in Berlin gave his impressions of the use of antistreptococcus serum in scarlet fever.[1] His statements are judicious, non-sensational and apparently wholly fair. Unfortunately his impressions of the value of the serums used (Aronson's, Moser's, Menzer's) are not favorable. Heubner has always believed that while streptococci are not the cause of scarlet fever, yet they are of the greatest importance in determining the mortality and complications of this disease. His experience with the various serums is somewhat limited as to the number of cases (twenty), but the individual cases seem to have been thoroughly well studied. His were selected cases. Those in which improvement succeeded the use of serum were early cases, the exact course of which could not possibly be foretold. In no case did he obtain a distinct impression of unquestioned specific healing by the serum, an experience entirely and diametrically different from that of the first twenty cases of diphtheria he treated with antidiphtheria serum. Heubner's future policy in regard to the use of antistreptococcus serum in scarlet fever is this: Serum may be used only in severe early cases, in which the prospects of recovery by other forms of treatment are minimal. It seems to be generally agreed, even by the rather enthusiastic Viennese observers that antistreptococcus serum has no effect on established complications (endocarditis, arthritis, etc.), and Heubner and Menzer both believe that it is contraindicated in cases with multiple foci of streptococcus localization. Heubner's experience is also valuable, because the serums he used are made according to different methods—Aronson's coming from horses immunized with human streptococci made especially virulent by repeated passages through animals; Moser's from horses injected directly with streptococci isolated from cases of scarlet fever; and Menzer's from horses treated with streptococci isolated from cases of rheumatism.

SPECIAL ATTRACTIONS FOR THE GENERAL MEETINGS.

A new departure will be instituted at the coming session of the American Medical Association, through which the general meetings held each evening will be more varied in character. Heretofore the meetings were devoted simply to orations. This year, on Tuesday evening, beside the Oration on Medicine, the title of which is "The Importance of Pathologic Anatomy in Clinical Medicine," by Dr. George Dock, Ann Arbor, Mich., there will be a symposium on research work in the United States. Dr. J. S. Billings, New York, will give

1. Berl. klin. Woch., 1904, 41, p. 372 (Gesellschaft der Charité-Ärzte).

an account of the work being done by the Carnegie Institution; Dr. L. Emmett Holt, New York, will speak of the Rockefeller Institute; Dr. Frank Billings, Chicago, of the Memorial Institute for Infectious Diseases; Dr. Harold C. Ernst, Boston, concerning the research work at Harvard, and Dr. Alfred Stengel concerning the William Pepper Clinical Laboratory. Wednesday evening Dr. W. J. Mayo, Rochester, Minn., will deliver the Oration on Surgery, entitled "The Association of Surgical Diseases in the Upper Abdomen." This will be followed by a symposium on "The Mutual Relations and Duties of the Government Medical Services and the Medical Profession." Dr. Victor C. Vaughan will talk on the subject "What Can the Medical Departments of the Army, of the Navy, and of the Public Health and Marine-Hospital Service Do for Medical Science?" Surgeon-Major William C. Borden, U. S. Army, will speak on "What Can the Medical Profession Do for the Army?" Surgeon C. F. Stokes, U. S. Navy, will speak for the Navy, and Surgeon-General Walter Wyman will speak for the Public Health and Marine-Hospital Service. Thursday evening the Oration on State Medicine will be delivered by Dr. Herman M. Biggs, New York City, on "Preventive Medicine; Its Achievements, Scope and Possibilities." Following this will be a symposium in which Dr. William H. Welch, Baltimore, will speak on "The Bureau of Animal Industry; Its Service to Medical Science"; Dr. D. E. Salmon, Washington, D. C., on "The Service of the Medical Profession to the Bureau of Animal Industry," and Dr. H. W. Wiley, Washington, D. C., on "The Bureau of Chemistry and Medical Science." These evening meetings will be held on Young's Pier, so there will be ample room for the large number that will certainly attend them.

Medical News.

CONNECTICUT.

Connecticut Members of the American Medical Association.—This association, organized for social purposes, holds a meeting annually, preferably at some seaside or country resort, which is simply an outing for a social good time, and to foster friendly personal relations. Every member of the Connecticut Medical Society is cordially urged to become a member. Information regarding this association may be obtained by addressing the secretary, Dr. J. M. Keniston, Hartford Hospital, Hartford, Conn.

DELAWARE.

Health and Other Appointments.—Drs. Peter W. Tomlinson and James A. Draper, Jr., have been appointed members of the Wilmington Board of Health, and Dr. Tomlinson has been elected president.——Dr. Henry W. Briggs, Wilmington, nominee of the president and fellows of the Medical Society of Delaware, has been appointed a member of the State Board of Medical Examiners.——Drs. L. August H. Bishop, William F. Davis and James H. Wilson have been appointed members of the Dover Board of Health.——Dr. Hiram R. Burton, Lewes, has been reappointed a trustee of the State Hospital for the Insane.

DISTRICT OF COLUMBIA.

Health of the District.—The report of the health officer for the week ended May 7, shows the total number of deaths to have been 104, 57 white and 47 colored; 122 births were reported, 67 were white and 55 colored. At the close of the week 9 cases of diphtheria, 26 of scarlet fever, 44 of typhoid fever, and 4 of smallpox were under treatment.

Health of the Panama Route.—Dr. J. C. Perry, surgeon U. S. P. H. and M.-H. Service, who recently submitted a report on the morbidity, prevailing diseases and mortality in the cities of Colon and Panama, has recently made a report on the prevailing diseases on the isthmus along the route of the canal, with special reference to the morbidity among the employes of the French canal company. The report is valuable and interesting, and is published in volume 19, No. 18, of April 19, 1904, of the Public-Health Report. This is a public document and will be mailed free on application to Surgeon-General Walter Wyman, Washington, D. C.

Qualifications and Reciprocity.—Senator Gallinger has introduced a bill to amend the act of 1896 regulating the practice of medicine in the district and providing for reciprocity. The chief provisions of the bill are as follows:

No applicant shall be licensed who is not of good moral character and free from mental defects and drug habits liable to interfere with the proper practice of medicine and surgery. Nor who, at the time of making application and for not less than two years prior to the date thereof, has not been lawfully authorized to practice medicine and surgery, and actually engaged in such practice, in the jurisdiction wherein he resides.

Nor unless the applicant acquired the right to practice medicine and surgery in such jurisdiction under conditions equivalent to those with which he would have had to comply in order then to have practiced medicine and surgery in the District of Columbia.

Nor unless the jurisdiction by virtue of whose license the applicant seeks exemption from examination in the District of Columbia grants to licentiates of the Board of Medical Supervisors of the District privileges equivalent to those which the applicant seeks.

Nor until the applicant has paid to the Board of Medical Supervisors such fee as may be fixed and required by the regulations of the board, but not more than the fee charged under similar circumstances by the jurisdiction by virtue of whose license the applicant seeks exemption from examination.

ILLINOIS.

Fifty Years in Practice.—On May 3, Dr. David M. McFall, Mattoon, began his fiftieth year of practice. He has been in Mattoon for 41 years.

Langdon Arrested.—"Dr." Peter R. Langdon, Kankakee, for whose apprehension a reward of $200 was offered, was arrested at Queenstown, Ireland, May 5, as he landed from the steamer *Majestic*.

Must Not Spit in Bloomington.—Bloomington has adopted an ordinance prohibiting expectoration on sidewalks, in public buildings, or in stores or private dwellings "against the consent of the owner, agent or occupant thereof."

Chicago.

Gift to Children's Hospital.—Mrs. Porter has given $75,000 toward a new building for the Maurice Porter Hospital, which henceforth is to be known as the Children's Memorial Hospital.

Lying-in Dispensary Opened.—The new dispensary erected by popular subscriptions for the Chicago Lying-in Hospital, at a cost of $20,000, was formally opened May 3. The nurses and internes of the hospital gave a gold loving-cup to Dr. Joseph B. DeLee, founder of the institution.

Summer Courses at University of Chicago.—Special courses covering the anatomy of the ear and nasal cavities, the anatomy of the larynx, and the anatomy and pathology of the eye, will be offered at the University of Chicago during the the middle of June.

INDIANA.

Hospital Addition Opened.—The addition to the Marion Hospital, which has been erected at a cost of $15,000, was formally opened April 20.

Dies on Eve of Graduation.—Clifford O. Burroughs, a senior student of the Medical College of Indiana, who had won distinction by the high character of his work, died April 18, at the Deaconess Hospital, Indianapolis, from typhoid fever, after an illness of 18 days, aged 22.

License Revoked.—On April 26, the State Board of Medical Registration revoked the license to practice of Dr. Eva R. Templeton, Indianapolis, because it was alleged she was a graduate of the Independent Medical College, Chicago, and obtained the permit to practice by irregular means.

Many Graduate.—Central College of Physicians and Surgeons, Indianapolis, graduated a class of 21 April 20. Dr. George D. Kahlo, dean of the faculty, presented the diplomas and Hon. Vinson Carter presided.——At the annual commencement exercises of the Medical College of Indiana, Indianapolis, April 22, Winfred E. Garrison, president of Butler College, delivered the address, and President Addison C. Harris of the University of Indianapolis presented diplomas to a class of 32.

Personal.—On April 20, Dr. William W. Wickham, Goshen, celebrated the fifty-seventh anniversary of his advent in that city.——Dr. and Mrs. Amos L. Wilson, Indianapolis, celebrated their fiftieth wedding anniversary April 25.——Dr. Kenneth I. Jeffries, interne at the Indianapolis City Dispensary, has resigned to accept the position of assistant superintendent of the Eastern Indiana Hospital for the Insane, East Haven, near Richmond.——Dr. John N. Hurty, Indianapolis, secretary of the State Board of Health, is confined to the house with a third attack of appendicitis.

LOUISIANA.

Endorses Heyburn Bill.—The Bossier Parish Medical Society, at its meeting, April 12, endorses the Heyburn pure food bill.

Additions to Portrait Gallery.—At the annual meeting of the trustees of the Eye, Ear, Nose and Throat Hospital, New Orleans, May 4, portraits of Gen. W. G. Vincent and Hippolyte Larouissini, first and second vice-presidents of the hospital, were unveiled.

Munificent Bequest to Tulane.—By the terms of the will of the late A. C. Hutchinson, the bulk of his estate, valued at nearly a million dollars was left to Tulane University Medical Department, and the Supreme Court of the State has decided that the college shall receive the bequest.

Tulane's Commencement.—At the annual commencement of the medical department of Tulane University, New Orleans, May 4, a class of 91 received diplomas from President Edwin A. Alderman. Prof. C. A. Smith, dean of the graduate department of the University of North Carolina delivered the annual address.

Establishes Detention Camps.—Dr. Edmond Souchon, New Orleans, president of the State Board of Health, accompanied by Dr. Charles P. Wertenbaker, U. S. P. H. and M.-H. Service, made an official visit of three days to Northwest Louisiana and established five detention camps to be used in case of an outbreak of yellow fever in Texas.

MARYLAND.

Baltimore.

To Fight Smallpox.—Health Commissioner Bosley has been allowed $2,000 by the board of estimates, to fight smallpox; during April he spent $1,200 in this work.

Rockefeller Gift.—The $500,000 Rockefeller gift has been received by the Johns Hopkins Hospital trustees. It covers the net loss by the fire, and will be used in rebuilding the 70 warehouses burned down.

Vital Statistics.—The deaths during April were 896, the largest number in four years. Fourteen cases of smallpox were reported, and scarlet fever was prevalent.——For the week ended May 7, 5 cases of smallpox were reported. In the mortality list, 36 deaths were credited to pneumonia and 34 to consumption.

Commencements.—At the Maryland Medical College commencement, May 5, there were 104 graduates. The prizes were given as follows: First, Frank W. Hachtel; second, George W. Shriver; W. S. Smith prize, I. A. Baker; B. A. Muse prize, I. H. Russell; Harry Gross prize, M. Abi-Massoud, Syria, and O. O. Eackle. Hon. John H. Poole, ex-United States senator, of Colorado, was orator.——The Baltimore Medical College graduated 75 May 5. Dr. Emil Novak received the highest prize, the college medal; Dr. G. E. McPherson, the Robert W. Johnson surgical prize; Dr. Emil Novak, the William E. Moseley gynecological prize, and Dr. E. E. Houck the A. C. Pole anatomical prize. There were 500 students enrolled last year. Dr. Bernard Skainer delivered the address.

Personal.—Dr. George W. Hemmeter has been appointed health warden of the Sixteenth Ward, vice Dr. Howard D. Lewis, resigned.——Dr. Charles R. Bardeen, associate professor of anatomy at the Johns Hopkins Medical School, has been appointed professor of anatomy at the University of Wisconsin.——The following have been made police surgeons: Dr. Wirt A. Duvall, chief surgeon; Drs. J. Claggett Robertson, John D. Norris, Andrew H. Whitridge and H. Lee Smith.——Drs. Frank W. Hachtel and Charles E. Benson have been appointed resident physicians at Franklin Square Hospital, and Dr. J. Asley Gilmer, resident physician of West End Maternité Hospital.——Dr. Francesco del Valle, who has resided here several years, has returned to Puerto Rico, where he will be assistant director of the Department of Health, Charities and Correction.

Library Report.—The report of the librarian of the Medical and Chirurgical Faculty of Maryland shows that the library now contains 13,833 volumes, 4,449 being bound journals. This does not include several thousand duplicates. There are 5,301 unbound monographs and reprints. The accessions for the year were 694; 1,585 books were borrowed and 4,501 readers were registered. The library receives regularly 152 journals. The work of the exchange of the Association of Medical Librarians has been carried on during the year, the lower hall being crowded with books and journals for that purpose. All the old and rare books have been placed in locked cases and can not be removed except by special permission. The income for the year was about $2,500, including faculty appropriation, the Frick fund, receipts from book and journal club, fines, sales, etc., and the expenses were about the same amount.

MASSACHUSETTS.

New Surgeon General.—Lieutenant Colonel Otis H. Marion, Allston, was appointed surgeon general of Massachusetts, May 2, vice Brigadier General Robert A. Blood, Charlestown, retired.

Guilty, and Defaults.—Dr. George S. Hatch, Boston, who was convicted in the Superior Criminal Court, April 28, of causing the death of Mary A. Welch by a criminal abortion, failed to appear when called for sentence April 29.

Dinner for Ehrlich.—On April 23, Drs. William T. Councilman, David W. Cheever, Franz Pfaff, and other Boston physicians, gave a dinner in honor of Professor Ehrlich of Berlin. President Eliot of Harvard University was also a guest of honor.

Antivivisectionists Again Defeated.—The efforts of the antivivisectionists this year again met final defeat, when in the house of the Massachusetts legislature, May 4, the adverse report of the probate and chancery committee was accepted and the bill desired by the petitioners was rejected by a vote of 35 to 90.

Loss Made Good.—St. Luke's Home for Convalescents, Boston, which lost about $40,000 through the defalcation of its treasurer, has already had this sum made good by gifts, and is doing its usual good work, especially for women, who, on their discharge from hospitals, are cared for a few weeks until they are again able to work.

Anniversaries.—On the occasion of his sixtieth birthday, May 2, friends of Dr. James R. Foster, North Attleboro, tendered him a reception and banquet and presented him with a handsomely equipped traveling bag.——Dr. and Mrs. Samuel Pitcher, Hyannis, celebrated the fifty-seventh anniversary of their marriage, March 30.

Personal.—Dr. Louis L. Bryant, Cambridge, was presented with a handsome dining-room set, April 28, by professional and lay friends.——Dr. Thomas B. Shea has been appointed a member of the Boston Board of Health.——Dr. David E. Harriman, South Hadley Falls, has been appointed associate medical examiner of the third Hampshire district.

Regulates Milk Supply.—The Boston Board of Health has made new regulations in regard to the milk supply. Henceforth milk may be condemned which has over 500,000 bacteria to four cubic centimeters, or a temperature exceeding 50 degrees. These regulations apply to all places where milk is on sale, such as stores, bakeries, restaurants, etc.

Fine and Imprisonment.—Dr. Robert Surles, who was recently released from state prison after serving seven years for performing a criminal operation, was sentenced, on April 26, at Worcester, to pay a fine of $500 and to serve three months in the house of correction for practicing medicine without a certificate from the Board of Registration in Medicine.

State or National Responsibility.—A case of leprosy discovered in Harwich, admitted from Portugal, through the port of New Bedford and now under the call of the State Board of Health, has raised the question whether, if it can be proven that he gained entrance through the neglect of the United States officials, the United States Government can be held for the expenses incurred by the state in his case.

NEW YORK

Medical Examiners Reappointed.—The regents have reappointed as medical examiners Drs. Joseph P. Creveling, Auburn, and Dr. Eugene Beach, Gloversville.

Fire Loss.—In the recent fire at Thousand Island Park, the cottage of Dr. Frederick Clark Bailey of Adams Center was destroyed, and that of Dr. Henry W. Carpenter of Oneida, was damaged.

House Physicians Appointed.—Drs. Harold E. Hoyt, Cambridge, and Frank E. White, Union, have received appointments

on the house staff of Ellis Hospital, Schenectady.——Drs. Charles Moore, John Mehnert and August Schlappi were appointed house physicians to the German Hospital, Buffalo.

More Alleged Manhattan State Hospital Abuses.—Coroner Nicholas T. Brown, in discussing the recent case of Abraham Wendorff, who had eight ribs fractured in that institution, said that the fact that the nurses were underpaid, incompetent and inexperienced was no excuse for such an occurrence. The physicians who permitted these brutalities were responsible.

Bills of Medical Interest Signed.—On May 3 Governor Odell signed bills, giving the state medical and county medical societies authority to adopt suitable by-laws; permitting medical societies to fix the qualifications for membership, and permitting the holding of autopsies on public patients in the Craig Colony of Epileptics if the bodies are not claimed 48 hours after death.

Health Officials Hold Office Illegally.—With the exception of two or three cities all the city health officers in the state are appointed under a state law. That law was amended a year ago last winter and, accidentally, the clause providing for appointing health officers was left out. The mistake was rectified by a bill passed at the close of the recent session. The question now arises whether the bill which legislated the office out of existence did not drop all health officers, and whether the men now in office are legally in power. If not, they will all have to be reappointed according to lawyers who have looked the matter up.

New York City.

Anonymous Gift.—New York University has received an anonymous gift of $12,800 for its medical department.

Jewish Hospital To Be Enlarged.—The Jewish Hospital has made arrangements for building an extension, to cost $10,000.

Convalescent Home.—A home for poor convalescents is to be opened and will be under the care of the Carmelite Sisters. It is to accommodate those who have been discharged from the hospitals and are still too ill to work.

Given Loving-Cup.—Dr. William T. Bull delivered his last lecture as professor of surgery at the College of Physicians and Surgeons, May 4, and was presented with a handsome loving-cup by the students of the junior and senior classes.

Gift to Columbia University.—Horace W. Carpentier has given $60,000 for the endowment of the Carpentier Professorship of Pediatrics in the medical school in memory of his brother, Dr. Ruben S. Carpentier. Dr. L. Emmet Holt is the incumbent of this chair.

Cerebrospinal Meningitis.—Within four days 18 cases of cerebrospinal meningitis were reported. This alarming spread of the disease has been mostly among the children of the tenements of the upper East Side. There were more than a dozen cases in Mt. Sinai Hospital during the past week.

Eye and Ear Infirmary May Close.—Since the meeting of the Trustees of this institution last month, practically no additional gifts have been received. Unless $60,000, the annual expense of the hospital, is forthcoming, it will have to be closed in September at the close of the fiscal year.

Fraudulent Vaccination Certificates.—Health Commissioner Darlington has issued a warning to parents against buying certificates of vaccination, which were on sale for ten cents each. There was no evidence that dispensaries had charged for such certificates, but there was proof that several physicians had sold them.

Tuition Too High.—The increase in tuition rates from $200 to $250 a year at the College of Physicians and Surgeons of Columbia University is alleged to be the reason why 98 students of that institution have announced their intention of going to other colleges for the remainder of their medical course.

Coroners Will Remain.—Mayor McClellan has vetoed the bill legislating the coroners out of office and substituting medical examiners. His reasons were that it was an innovation on a time-honored system, and was so far a mere experiment. The proponents did not, in his opinion, defend their measure successfully nor answer the objections as to its justice, humanity, economy or efficiency. The abuses that had crept into the present system might be remedied by legislation without destroying the system.

To and From Europe.—Dr. Carl Fulda, Brooklyn, arrived, April 27.——Dr. and Mrs. Valentine Mott and Dr. and Mrs. H. D. Weller and Drs. Joseph L. Anderson, S. Baxter, J. C. Logan and D. L. Gibson sailed May 5.——During the past week Dr. J. C. Roberts of the New York Board of Health arrived on the *Teutonic*, and Dr. and Mrs. J. O. E. King and Dr. S. W. Werner sailed from Hamburg.——Dr. and Mrs. F. W. Eaton and Dr. Charlton Wallace arrived from the Mediterranean.

Contagious Diseases.—There were reported to the sanitary bureau for the week ended April 30, 1,398 cases of measles, with 46 deaths; 490 cases of tuberculosis, with 190 deaths; 419 cases of scarlet fever, with 26 deaths; 409 cases of diphtheria, with 62 deaths; 44 cases of varicella; 6 cases of smallpox; 40 cases of typhoid fever, with 6 deaths, 30 cases of cerebro-spinal meningitis, with 7 deaths, and 380 cases of pneumonia, with 234 deaths.

Typhoid-Fever Map of New York.—The Board of Health has prepared a most interesting map of Manhattan Borough, to be sent to the St. Louis Exposition, illustrating the methods of the New York Health Department in fighting typhoid and other contagious diseases. The whole display, it is said, will be the largest and most complete display of health department work ever assembled in this country. The typhoid chart shows every case that has been reported this year. By the color of pins the history of what is known of the origin of each case is told. One striking fact brought out by the chart is that the region between Fourteenth and Forty-second streets, and for several blocks on either side of Broadway was almost exempt from the disease. The number of cases in Manhattan from January 1 to April 1 was 200, against 446 for the corresponding period of last year.

NEW JERSEY.

Smallpox in Gloucester.—Three cases of smallpox were reported in Gloucester City during the week. These are all in one family. The malady is said to have been contracted in Philadelphia.

Jersey City Health Board.—Drs. Gordon K. Dickinson, Frank D. Grey, George E. McLaughlin, Joseph M. Rector, John P. Henry, Fred E. Lambert, a plumber, a dentist and the president of the Hudson County S. P. C. A., make up the personnel of the new board of health of Jersey City.

Society Elections.—CAMDEN COUNTY MEDICAL SOCIETY.—At the annual meeting of the society, April 25, the following officers were elected: President, Dr. Joseph H. Wills, Camden; vice-president, Dr. William A. Westcott, Berlin; secretary, Dr. Paul M. Mecray, Camden; treasurer, Dr. Joel W. Fithian, Camden; historian, Dr. Alfred Cramer, Camden; reporter, Dr. Ezra B. Sharp, Camden; censors, Drs. Harry H. Sherk and William A. Davis, Camden, and trustee, Dr. Edmund L. B. Godfrey, Camden.——SALEM COUNTY MEDICAL SOCIETY.—At the annual meeting the following officers were elected: President, Dr. John F. Smith; vice-president, Dr. Clifford M. Sherron; secretary and treasurer, Dr. Henry Shavanne; reporter, Dr. William H. Carpenter; censors, Drs. Nathaniel S. Hires, Richard M. A. Davis and B. Bilderback, all of Salem.

PENNSYLVANIA.

Personal.—Dr. Daniel W. Shelly has been elected medical inspector of Ambler.——Dr. William B. Ulrich, Chester, was tendered a reception, May 4, in honor of his seventy-fifth birthday anniversary and his golden wedding.

Arrest of Illegal Practitioners.—Dr. Henry Beates, Jr., president of the State Board of Medical Examiners, reports the arrest of three illegal practitioners. One is Thomas C. Eldridge, who exhibits a fraudulent license from the state of Michigan, who has been practicing very successfully, so far as money returns are concerned, and also has killed one patient. The other two are candidates who failed before the State Board of Medical Examiners, on more than one occasion, and nevertheless established themselves in practice. The state of the public mind is such, at last, in Pennsylvania, as to enable these cases to be successfully pushed to the full extent of the law. The only regret is that the Act of Assembly, governing practice in Pennsylvania, has not a punitive clause, which, in addition to the fine of $500 for each offense, should have latitude from that figure to at least $2,000 and imprisonment of from one to five years, to be determined by the discretion of the court. The lay press of Philadelphia is at last publishing the practices of these illegal "clinicians." The following is a statement of the legal aspects of the prosecution:

The state of Pennsylvania is infested with charlatans and quacks, and in this respect is no exception to other states, who attempt to avoid the law which governs the practice of medicine, and who have successfully thus far done, taking advantage of a technical interpretation of what constitutes the practice of

medicine, which a judge, some years ago on the supreme bench of the state of New York gave. The decision was that the practice of medicine consists in the treatment of disease by the use of medicine.

The inference drawn from this definition is that anybody who proclaims and professes to be able to treat diseases, without the use of drugs, is not amenable to the law. The United States report for 1888 contains the decision of Chief Justice Field, who spoke for the unanimous opinion of the U. S. Supreme Court. In that opinion the common practice of law is enunciated, which demonstrates and clearly proves the constitutionality of all statutes which require proof of the possession of qualification on the part of everybody who offers his services and assumes the responsibilities for the treatment of disease, deformity and injury.

Any one, therefore, who so poses before the public, by any means whatsoever, who is not a licentiate of any commonwealth, is an illegal practitioner. Pennsylvania, acting on the principle of the law involved, has proceeded to prosecute all individuals concerning whom there is unmistakable proof of their posing as physicians who do not possess the license issued by the state.

In the preliminary hearings before the magistrate the presentation of these facts has resulted in every case thus far apprehended, in being held in bail for trial in court. It would be well for every state recognizing the facts and the involved principles to know that anybody following a vocation for a livelihood which involves the interests of fellow men, must possess a license from the state, which license is the state's guarantee of qualification.

As soon as this principle becomes generally recognized both by the laity and by the profession, the end of the fake physician, quack or charlatan is determined.

The question could well be raised, whether or not persons patronizing those not possessing a license are thus not guilty of misdemeanor against the laws of the commonwealth. Nothing in this restriction can be regarded as class legislation. The conditions are alike for all and consequently will happen to all who may desire to enter the profession of medicine. The law is just in requiring compliance with these conditions, which the state by common consent and the enactment of statutory laws, established as a standard requirement of qualification.

Philadelphia.

Personal.—Dr. Harry B. Brusstar sailed April 30 for Bad Nauheim, Germany. On account of failing health, his physicians have advised abstinence from practice and absolute rest.

City Virus Plant Contemplated.—The city is considering the establishment of a $40,000 plant for the preparation of vaccine virus to combine with that for the manufacture of diphtheria antitoxin.

Treves on a Tour.—Dr. J. William White leaves for San Francisco in a few days to meet and accompany across the continent Sir Frederick Treves, who will arrive in San Francisco in June. He will leave Philadelphia the latter part of June, and will be accompanied by Dr. White and his family to Liverpool.

Address on the Navy.—Dr. R. A. Marmion, medical director, U. S. N., addressed the students of the Medical Department of the University of Pennsylvania May 5, on the work in the Medical Corps of the Navy and the inducements and advantages now held out for candidates for the service. His lecture treated of the work of the corps, the condition of life and recent improvements in the service. He spoke also of the special training received by candidates in the medical service school.

Dishonest Student Expelled.—The faculty of the Medico-Chirurgical College have expelled a member of the senior class, who was charged by the county medical society with practicing medicine illegally. The society is adopting rigorous measures to bring to justice the men who are guilty of this misdemeanor. During the past week several arrests have been made of men who have been practicing medicine illegally; of men who have not passed the required state examination. Several more arrests are to be made. All the men thus far brought to justice have been held in bail for their appearance at court.

Health Report.—A slight abatement in the prevalence of typhoid fever has been noted; 277 new cases and 36 deaths were reported during the last week. This indicates that the progress of the disease has been checked. Smallpox continues throughout the city; 28 new cases were reported and 5 deaths. Deaths during the week numbered 572, a decrease of 20 from last week and an increase of 74 over the corresponding week of last year. This total is made up largely of pneumonia and other lung diseases, 193 deaths being attributed to these causes alone. There were 98 deaths from pneumonia. This has been about the average since January 1.

To Study Tuberculosis in Europe.—Prof. Leonard Pearson, state veterinarian, and Dr. M. P. Ravenel will go abroad under the auspices of the Phipps Institute, to investigate the methods of Professors Maragliano of Italy, Thomassen of Holland, Baraga of Sweden, McFadyan of England, Marmorek of Paris, and Behring of Marburg, in the treatment of tuberculosis. Drs. Ravenel and Pearson will also spend a few months' study with Professor Neusald in Koch's Laboratory in Berlin. The investigation is to be devoted almost exclusively to the study of inoculation and vaccination methods. The data and knowledge gained are to be tabulated and arranged, and will be given to the profession by the Phipps Institute.

Samaritan Hospital Clinics.—The board of trustees and the medical staff of the Samaritan Hospital, Broad and Ontario streets, invite the delegates and members of the American Medical Association to attend a special series of clinics to be held in the amphitheater of the hospital during the week immediately following the meeting of the Association in Atlantic City. The following program is announced: Monday—Surgical, by Dr. W. Wayne Babcock at 8:30 p. m.; Tuesday—Medical, by Dr. Samuel Wolfe at 8:30 p. m., and Obstetric, by Dr. John C. Applegate at 9:30 p. m.; Wednesday—Gynecologic, by Dr. Wilmer Krusen, at 8:30 p. m.; Thursday—Ophthalmologic, by Dr. John W. Crookey, at 8:30 p. m.; Friday—Gastrointestinal, by Dr. Boardman Reed at 8:30 p. m., and Genitourinary, by Dr. Loux at 9:30 p. m.

Sherrington's Address.—Prof. Charles S. Sherrington, M.D., of the University of Liverpool was the guest of the University of Pennsylvania, May 5, and delivered a lecture on "Cerebral Localization," which was of special interest because of his description of his investigations on the brain of a gorilla, the only experiment of the kind on record. This experiment cost about $2,000, and continued uninterruptedly from 4 o'clock of the morning of one day until 2 o'clock of the morning of the subsequent day, the animal being under the influence of chloroform during the entire period of the experiment. The results of this experiment led Professor Sherrington to delimit the psychomotor regions, eliminating the posterior central convolution, and suggesting certain minor changes in other areas. After the lecture Professor Sherrington was entertained at dinner at the University Club.

Hospitals.—During April the Polyclinic Hospital treated 1,959 new cases in the dispensary, and 6,517 return visits were made, making a total of 8,476 cases treated; 615 patients were treated in the receiving ward, and 128 patients were admitted to the hospital wards.——In the Episcopal Hospital there were 255 patients admitted to the wards and 7,056 patients treated in the dispensary.——In the Pennsylvania Hospital there were 365 patients in the wards; 1,587 were treated in the receiving ward and 1,599 in the dispensary, making a total of 3,551 for the month. The work done during the year 1904 in the Pennsylvania Hospital is as follows: In the wards, 4,337; receiving wards, not remaining in the house, 21,466; out-patient department 17,290, making a total of 43,093; an average of one case every twenty minutes, night and day throughout the year applied at the receiving wards for treatment.——In the Presbyterian Hospital there were treated 410 patients, 210 of whom remain in the institution; 93 ambulance calls were made, and 2,083 patients were treated in the dispensaries.

GENERAL.

American Urological Association.—The annual meeting of this association is to be held at Atlantic City, June 8 to 9.

Typhoid Among Marines in Cuba.—An epidemic of typhoid fever is reported among the American marines in eastern Cuba.

American M.D.'s in Germany.—The German supreme court forbids the use of the title "Doctor" in Germany, when granted in the United States.

Reorganization of Red Cross.—A scheme has been proposed whereby a new charter will be issued to the Red Cross Society, with various changes in the plan of management.

American Therapeutic Society.—The fifth annual meeting of this society will be held at the New York Academy of Medicine, New York City, June 2 to 4. An interesting program has been prepared, including a symposium on the recent advances in special therapeutics.

Filipinos Bring Trachoma.—Among 78 Filipinos who have come to the United States for the Filipino village at the St. Louis Exposition, 19 have trachoma. Since the Supreme Court has decided that the Philippines are a part of the United States, the application of immigration laws and deportation are said to be out of the question.

Progress of Ratification in New York.—At a meeting of the joint committee of conference held at the New York Academy of Medicine, May 6, 1904, the following resolutions were passed:

Resolved, That the president and the secretary of the Joint Committee of Conference be authorized and directed to make a certificate provided for in the tenth paragraph of the agreement,

and the counsel of the committee be directed to proceed with diligence to obtain a final order for the consolidation of the corporations, pursuant to the terms of the agreement, and that the form of the certificate to be made by the chairman and the secretary, be in the form of the draft certificate submitted to this committee, which is as follows:

SUPREME COURT, NEW YORK COUNTY.

In the matter of the application of the Medical Society of the State of New York and the New York State Medical Association, for an order consolidating the said corporations, pursuant to the Act, Chapter 1, of the Laws of 1904:

This is to certify that the Joint Committee of Conference mentioned in the agreement for the consolidation of the Medical Society of the State of New York and the New York State Medical Association, which agreement was unanimously adopted by the Medical Society of the State of New York, at its annual meeting at Albany, Jan. 26, 1904, and by the New York State Medical Association at a special meeting of the association held in New York, March 21, 1904, has ordered the publication of said agreement or of any questions in connection therewith, to the county medical societies or associations referred to in said agreement, and that the conditions precedent to an application to the court for an order consolidating the Medical Society of the State of New York and the New York State Medical Association have been fully complied with, and this certificate is made pursuant to the tenth paragraph of said agreement.

Thirty out of 35 county associations have ratified; 1, Onondaga, has refused to ratify, 4 have not yet reported. The associations that have ratified represent a membership of 1711, and those that have not acted a membership of 42. The one refusing to ratify has 14 members. Ratifications have been received from 47 out of the 51 county societies; 4 have not yet acted. Those which have ratified represent a membership of 5,589, those which have not yet acted a membership of 164. According to the agreement, article 10 declares that:

Whenever the chairman and secretary of the Joint Committee of Conference shall certify that the conditions precedent to an application to the court have been fully complied with, the presidents of the respective corporations shall, and they are hereby authorized and required in the name and behalf of their respective corporations to petition the Supreme Court for an order to consolidate in accordance with the terms thereof.

Therefore all county associations and societies that have not ratified will be asked to appear before the court at a specified date, appointed by the court, and show cause why the consolidation should not be completed according to the terms of the agreement, despite their failure to ratify.

FOREIGN.

Russians Studying Japanese.—The St. Petersburg Medico-Military Academy has opened courses in the Japanese language for physicians and students.

Infant Mortality in Australia.—A decreased birth-rate and an increased infant mortality is reported from all of the states of Australia and New Zealand.

Legacy for History of Medicine.—Professor Puschmann of Vienna, left a legacy of more than $125,000 to the University of Leipsic, the income of which is to be applied to promote the study of the history of medicine. He was at one time privat docent of the history of medicine at Leipsic.

Medical Journal Wins Suit.—A general practitioner in Berlin, Dr. Wolf Becher, took exceptions to an article published in the *Berliner klinische Wochenschrift* last year, and sued the proprietor of the journal, Prof. C. A. Ewald, for damages, claiming that he had been defamed. The article in question was written by Dr. Ritter, the subject being "Sanatoria for Children." The suit came up for trial last month, but was dismissed, the plaintiff being assessed the costs.

The Roentgen Decennial.—As already announced, the tenth anniversary of the discovery of the Röntgen rays will be celebrated next year at Berlin by a congress and exposition of Röntgenology, to be held April 30 to May 3, 1905. The committee of organization includes Eberlein, Immelmann and Cowl of Berlin, with Albers-Schönberg of Hamburg and Rieder of Munich. Professor Röntgen will be the guest of honor and von Bergmann will preside.

The Medical Insurance Company in Belgium.—We recently referred to the accident insurance company founded and conducted by physicians in Belgium. The annual meeting was held April 17, and out of the total 14,000 stockholders 6,085 were present in person or by proxy. Although organized only three years ago, the income last year was $25,000. A dividend of 5 per cent. could have been declared, but it was voted to set the sum aside for future contingencies when the new law on accident insurance goes into effect. Dr. L. Beco is president of the company, and the *Gazette Médicale Belge* of Liège has been its mouthpiece. The details of the annual meeting are given in the issue of April 21.

LONDON LETTER.

Central African Natives in the Transvaal.

The report of the health of the Central African natives imported to work the Transvaal mines is far from satisfactory. Three batches have been imported, as follows: 385 in June last, 345 in August and 88 in September. The total mortality was very high, nearly 82 per 1,000. The heaviest mortality occurred in the first batch, in which influenza broke out soon after its arrival. About 20 died from it in 6 weeks. A great mistake appears to have been made in bringing these natives of hot, low-lying regions to the high plateau of the Transvaal in the middle of winter. They should have been brought down during the hot season so as to enable them gradually to become acclimatized to the cold weather. Another source of illness was gross carelessness of the natives in respect to health and disregard of the most elementary precaution with regard to change of temperature.

The Port of London.

The annual report of the health officer for the port of London shows the immense amount of sanitary work involved in the shipping of the world's metropolis; 35,485 visits of inspection to vessels in the river and docks were made, and 3,133 ships required cleansing. The total number of vessels medically inspected at Gravesend was 2,552, which was higher than any number in the preceding five years. At Sheerness 342 ships were inspected; 157 cases of infectious disease were reported and 103 patients were removed to the Port Sanitary Hospital, of whom 3 were suffering from suspected plague, 11 from smallpox, 55 from typhoid fever, and 13 from "continued fever." The increased diffusion of plague throughout the world, the outbreaks of yellow fever in Mexico, Brazil, and elsewhere, and the existence of cholera in Syria and Palestine caused every precaution against the importation of these diseases to be taken. In order to enable the port sanitary authority to deal with outbreaks of typhoid fever due to shell fish polluted by sewage its jurisdiction will have to be considerably extended so as to include the estuaries in which the most famous oyster layings are situated. During the year 955 tons of food were seized and condemned. The imports of frozen mutton and lamb showed an increase of 960,000 carcasses.

The Plague.

In Cape Colony for the week ending March 26 no fresh cases of plague were found in man, but infected rats were discovered at Port Elizabeth and East London. In the Transvaal the number of reported cases up to April 9 was 154, of which 18 occurred in Europeans. The deaths amounted to 72, of which 7 were in Europeans. Up to April 16 only 4 more cases were reported.

Death of Sir Henry Thompson.

One who occupied a foremost position both in the profession and in the social life of the metropolis in the last part of the nineteenth century has passed away. Sir Henry Thompson (see notice of death, THE JOURNAL, April 30, p. 1154) was at once a great surgeon, a talented artist, a successful novelist, an authority on dietetics, a bon vivant, and the most prominent advocate of cremation in the country. He was indeed one of the most brilliant and versatile men that has ever adorned the profession. Born in 1820 he entered University College as a medical student in 1843, where he gained many honors. He graduated at the University of London in 1851, taking the gold medal in surgery. He became a fellow of the Royal College of Surgeons in 1853, having previously been awarded the Jacksonian prize of 1852 for his essay on "The Pathology and Treatment of Stricture of the Urethra." In 1860 he again successfully competed for the Jacksonian prize, the subject being "The Healthy and Morbid Anatomy of the Prostate Gland." In 1853 he was appointed assistant-surgeon to University College Hospital, in 1863 full surgeon, and in 1866 professor of clinical surgery. He proved a most successful teacher and operator. As indicated by his prize essays he devoted special attention to genito-urinary surgery from the beginning of his career. He assiduously studied under the great masters of other schools, and particularly came under the influence of the French surgeon, Civiale, who may be said to have first shown the possibility of lithotrity. Thompson soon became the foremost authority on genito-urinary surgery in this country, greatly improving instruments and laying down with great precision the rules for this specialty, of which he was the pioneer. These he embodied in his principal work, "Diseases of the Urinary Organs," which was published in 1868. It soon became a classic, and ran through eight editions, and

was translated into French, German, Italian, Spanish, and Russian. A supplementary work, "Practical Lithotomy and Lithotrity," achieved equal success. In 1863 he scored his greatest success by successfully operating on the king of the Belgians. The famous Civiale had previously discovered and crushed a stone in the bladder. After some relief the symptoms returned and many operations were performed without permanent success. The king endured great suffering, which he thought was due to a fragment of stone impacted in the neck of the bladder. At last he determined to seek the aid of English surgery, but he was so sceptical of the value of surgery that when Thompson was summoned he refused to submit to exploration of the bladder. The English surgeon, in the presence of his Belgian colleagues told the king that he was convinced that there must be a stone in the bladder, and that if he were not allowed to make a complete examination, and to act according to the condition found he must ask permission to be allowed to retire from the case. The king was very angry and dismissed all the physicians from the room. But the Belgians thoroughly approved of Thompson's course, Dr. Koopel exclaiming as they passed out "Vous avez bien parlé at bien fait." On the following day the king consented to an operation, which was completely successful. Thompson received a fee of $15,000 and various honors. The incident might have aroused some feeling of jealousy in Civiale, but Thompson, with admirable courtesy and tact, wrote him a letter describing the case, and attributing his success to the benefit he had derived from Civiale's teaching. The French surgeon returned the compliment by recommending Thompson's work on the prostate to the Académie de Médecine for the Prix d' Argenteuil, given for the best work on urinary surgery, with the result that it was awarded to him. His operation for stone on Napoleon III when in exile in England was not so successful, but this was not his fault because the king for political reasons deferred the operation too long. Fatal uremia followed lithotory. Sir Henry Thompson contributed largely to the medical journals, societies and surgical text-books. In "Holmes' System of Surgery" he wrote the section on the "Surgery of the Urinary Organs." Outside his specialty he took the greatest interest in and contributed to the literature of many topics. His indeed was a strenuous life. He wrote on such diverse subjects as "Moderate Drinking," "Cremation and Disposal of the Dead," "Diet in Its Relation to Age and Activity," and "An Attempt to Estimate the True Value of Prayer for the Sick," which aroused a theological storm. He was master of a graceful and trenchant style, and his writings were always effective and widely read. His two novels "Charlie Kingston's Aunt" and "All But," though not sufficient to form the groundwork of a literary reputation were most successful and pleased the public. The former ran through 15 editions in a short time. It was founded on the fate of a lady, who when away from home was suddenly deprived of all memory of her name, residence or identity. The opening scene was laid in the dissecting room of the University College Hospital. As an artist his position was much higher. He no doubt inherited his talent from his maternal grandfather, who was a distinguished artist. He was seldom without a pocketbook in which he would make pictorial memoranda of events whether witnessed in the wards or streets. After studying under Elmore and Alma-Tadema he became a regular exhibitor at the Royal Academy. His academy pictures "The é la Russe" and "Old Blue, Still Life" were hung in the Paris salon. Since 1874 he was president of the cremation society, and with his pen did much to help the movement both in England and on the Continent. As a host his reputation was unique; he reduced entertaining to a fine art. He established his famous "octaves"—dinners of 8 courses, for 8 people, at 8 o'clock. The main idea was that the guests should not exceed a number which seated round an oval table could all unite in the discussion of a single topic which might arise. The food was exquisite in kind, perfectly cooked and perfectly served, and the guests were chosen and seated with due reference to tastes and topics. These dinners were continued for 30 years, and at them met nearly every one of eminence in science, public life, art, letters, law and medicine.

The Treatment of Sewage.

The transmission of typhoid fever by shellfish taken from sewage-contaminated waters has been pointed out more than once recently in THE JOURNAL. The commission appointed to inquire into the methods of treating and disposing of sewage have now issued a third volume of their fourth report, a copiously illustrated blue-book of 316 pages, which is entirely devoted to reports by Dr. Houston on bacteriologic investigations, with special reference to the contamination of shellfish. The following conclusions are drawn "on a broad and common-sense view of the whole investigation": 1. That a water, which from the bacteriologist's point of view would be considered very impure, may after filtration, although still containing an appreciable number of bacteria seemingly of intestinal origin, be used for domestic purposes without definite or detectable harm. 2. That the water of a tidal river grossly polluted in its lower estuarial reaches may, after a flow of some twenty-five miles, become so far purified by sedimentation, dilution, and the operation presumably of bactericidal agencies, as to become seemingly as little objectionable, or in some respects less objectionable, bacteriologically, than certain public water supplies. 3. That the deposition in the sea of chemically precipitated sludge in enormous quantities, if carried out under proper conditions, need not result in the production of serious pollution. The first conclusion is somewhat modified by an appended note stating that it is not implied that impure waters after careful filtration are necessarily safe. The results are not very definite, but are a contribution toward the solution of the questions raised. They show the danger of hastily condemning waters without a wider knowledge of comparative bacteriology, and of the correlation of bacteriology and epidemiology than is available at present.

Malaria in the Malay Peninsula: Success of the Anti-Mosquito Campaign.

The state surgeon of Selangor, one of the federated states of the Malay Peninsula, has described a severe outbreak of malignant malarial fever in the malarial district of Klang. A new port was constructed and opened under the name of Port Swettenham in September, 1901. Almost immediately malaria increased to an alarming extent. Almost the whole of the laborers were attacked, and many severe cases occurred among the ships' crews. Of 133 persons living in government quarters 80 were attacked between September 15 and November 28. Of 27 temporary shop houses with 127 inmates no fewer than 78 persons living in 25 of the shops contracted the disease during the same period. Blocked drains and shallow pools were found along the whole sea front and by the side of the road, containing large numbers of anopheles and culex larvæ. A drainage scheme was carried out and all pools containing larvæ were regularly sprinkled with crude kerosene oil. The majority of the coolies working at the port were given a daily dose of 10 grains of quinin. By December 10 marked improvement was reported. During 1901, 52 deaths from malarial fever occurred in the district hospital; in 1902 there were only 9 deaths. In the town of Klang and the port of Swettenham, where extensive sanitary works were carried out, malarial fever has decreased by 67 per cent., whereas in the remainder of the Klang district which has not been dealt with in any way malarial fever has increased by 3.5 per cent.

Correspondence.

Sleeping Car Improvement.

MEMPHIS, TENN., May 2, 1904.

To the Editor:—Now that the Pullman Company intends making sanitary changes in their sleeping cars, might this not be an opportune time to advocate some change in the car structure, whereby sick and injured persons can be moved without so much inconvenience? At times patients have to undergo torture in being squeesed through the narrow and tortuous entrance of a sleeper, or else have to be hoisted up to and through a narrow window. This at times frightens a patient, and is not entirely without risk. I believe that with slight changes in the construction of a sleeper, all of this could be avoided, and would certainly add to the comfort and safety of patients.

ALFRED MOORE.

Queries and Minor Notes.

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish his name will be faithfully observed.

YOHIMBIN.

SANDERSVILLE, MISS., May 3, 1904.

To the Editor:—I wish to secure some yohimbin hydrochlorate for use in practice. Can you inform me what it is and where it

may be obtained? Have not found it listed by any pharmaceutic house. Any information concerning it will be appreciated.

M. D. ETHRIDGE.

ANSWER.—Yohimbin is the alkaloid of the yohimbebe bark—the bark of a tree growing in the Kameroons, in German Africa—belonging to the natural order *Apocynaceæ*, species *Corynanthe Johimbehe*. The alkaloid, supposed to be the active principle, is obtained by a process patented in England by Spiegel of Berlin. The alkaloid occurs in needles, is almost insoluble in water, melting at 234 degrees C., and has the chemical composition $C_{21}H_{26}N_2O_3$ or $C_{21}H_{28}N_2O_3$. The hydrochlorid has been used in impotency in dose of 0.005 (five milligrams). Manufacturers: Riedel in Berlin and Merck in Darmstadt, Germany; factors for the United States, Lehn & Fink, New York City. Since its first introduction, about two years ago, it has been given little mention in the medical literature.

Marriages.

WILLIAM BLENDER, M.D., to Miss Meda Klotz of Columbus Junction, Iowa.

JOHN HOUFF, M.D., to Miss Elizabeth May Nichols, both of Baltimore, April 30.

OSWIN W. BERKY, M.D., Bally, Pa., to Miss Amy Latshaw of Barto, Pa., April 29.

CALVIN B. STARK, M.D., Shiloh, Ark., to Miss Leila Roper of Rosebud, Texas, April 12.

EMIL T. CHERRY, M.D., Altoona, Pa., to Miss Mary R. Eddy, of Ashland, Ohio, April 26.

D. W. WRIGHT, M.D., Langley, S. C., to Miss Nannie Keister, at Roanoke, Va., April 27.

CHARLES HUFF WATERS, M.D., to Miss Meta L. Thorn, both of Trenton, N. J., April 21.

CARL VICTOR MALMGREN, M.D., to Miss Abbie Smith, both of Virginia, Minn., April 21.

EDWARD F. DOWD, M.D., to Miss B. Gertrude Connelly, both of Waltham, Mass., April 27.

LEWIS JEFFERSON DANIELS, M.D., to Miss Anna Estelle Jung, both of Milwaukee, April 20.

CHARLES HERBERT PHIPER, M.D., to Miss Eleanor Lois Grover, both of Chicago, May 4.

SYLVESTER JAMES DEEHAN, M.D., to Miss Gena Gallagher, both of Philadelphia, April 27.

CHARLES A. GEORGE, M.D., Berryville, Ark., to Miss Georgia Robinson, of Kansas City, Mo.

WILLIAM J. FRICK, M.D., to Miss Katharine J. Menet, both of Kansas City, Mo., April 28.

JOHN M. ANDERSON, M.D., to Miss Minnie La Belle Jones, both of Montgomery, Ala., April 30.

HARPER ANZIE WRIGHT, M.D., Calvin, Pa., to Miss Bertye Josephine Maier of Baltimore, February 9.

WILLIAM INSCHO DEAN, M.D., Mayville, N. Y., to Miss Margaret Moran of Lyons, N. Y., April 27.

ARTHUR C. LEWIS, M.D., Fall River, Mass., to Miss Fanny Lynch of South Somerset, Mass., April 27.

ALFRED G. BULL, M.D., Wilkesbarre, Pa., to Miss Mary Eleanor McDonald of Philadelphia, April 27.

ROBERT GORDON NORFLEET, M.D., to Miss Nancy Elsey Woolford, both of Princess Anne, Md., April 27.

WILLIAM CLARK HIENEN, M.D., Whittemore, Iowa, to Miss Claribel Cook Leonard of Newton, Iowa, May 3.

ROBERT MOORE BLANCHARD, M.D., assistant surgeon U. S. Army, to Miss Mary Wallace Dewitt, daughter of Brigadier-General Calvin Dewitt, M.D., U. S. Army, at Washington, April 26.

Deaths.

William Barton Hopkins, M.D. University of Pennsylvania, 1874, of Philadelphia, died of uremia, after a few days' illness, May 4, aged 50. He was the grandson of Dr. Samuel Hopkins, and the grand-nephew of that eminent physician, Dr. John Rhea Barton. After graduation he served twenty months as resident physician in the Pennsylvania Hospital. He had been an active member of the College of Physicians since 1879. Dr. Hopkins was made dispensary surgeon to Episcopal Hospital in 1879 and regular surgeon in 1884. He was made surgeon to the Pennsylvania Hospital in 1895. He was also visiting surgeon to the Orthopedic Hospital. Dr. Hopkins contributed many valuable and practical papers to medical literature. The two most prominent works were his book on "The Roller Bandage" and his recent book, "Clinical Treatise on Fractures."

Luther D. Jacobs, M.D. University of Pennsylvania, Philadelphia, 1866, a member of the American Medical Association; one of the most prominent and respected physicians of Emporia, Kan.; local surgeon of the Santa Fe system; member of the National Association of Railway Surgeons and the Kansas Medical Society; ex-president of the Santa Fe Railway Medical and Surgical Society; president of the Lyon County Medical Society, and fellow of the American Academy of Medicine, died in a hospital in Chicago, April 28, after an operation for disease of the stomach.

Almon Clarke, M.D. University of Michigan, Ann Arbor, 1862, formerly chief surgeon of the National Soldiers' Home, Milwaukee, president of the Wisconsin Medical Society in 1894, and professor of physical diagnosis in Milwaukee Medical College, a surgeon in the Vermont Volunteers during the Civil War, died at his new home in Pensacola, Fla., May 1, after a short illness, aged 63.

Edward Reed Wheeler, M.D. Bellevue Hospital Medical College, New York City, 1864, of Spencer, Mass., surgeon during the Civil War; a member of the American Medical Association; founder of the Spencer Free Dispensary; formerly president of the Worcester County Medical Society, and a councilor of the Massachusetts Medical Society, died suddenly from angina pectoris at Winthrop Beach, Mass., April 30, aged 64.

Giles S. Mitchell, M.D. Medical College of Ohio, Cincinnati, 1875, a member of the American Medical Association; professor of gynecology in the Cincinnati College of Medicine and Surgery; ex-president of the Cincinnati Academy of Medicine, and the Cincinnati Obstetrical Society; surgeon to St. Mary's Hospital, died suddenly at his home in Cincinnati, May 5.

John McQ. Stansil, M.D. University of Maryland School of Medicine, Baltimore, 1872, a member of the American Medical Association and the Medical Society of the State of North Carolina; surgeon of the Seaboard Air-Line Railway, died suddenly from heart disease while attending a meeting of school trustees at Rockingham, N. C., April 25, aged 55.

John R. Hawkins, M.D. Rush Medical College, Chicago, 1900, a member of the American Medical Association, coroner of Minnehaha County, S. D., prominent professionally and in National Guard circles, died from liver disease at his home in Sioux Falls, May 3, after a prolonged illness.

Orissa W. Gould, M.D. Woman's Medical College of the New York Infirmary, New York City, 1892, noted for her charitable and philanthropic work among the poor of the East Side, died at the New York Hospital, May 3, from cerebrospinal fever, after an illness of three days, aged 43.

James Griffin Conly, M.D. Rush Medical College, Chicago, 1862, the oldest practitioner in South Dakota, died at his home in Elk Point, May 8, from pneumonia, aged 66. He served throughout the Civil War as surgeon of the Third Wisconsin Volunteer Infantry.

Melvin W. Caster, M.D. Medical College of Ohio, Cincinnati, 1877, formerly coroner and health officer of St. Louis County, Mo., and for the last four years postmaster of Clayton, died at his home in that place, April 30, from pneumonia, after a short illness, aged 73.

Benjamin F. Moulton, M.D. Harvard University Medical School, Boston, 1867, who, while still a student, served as surgeon during the Civil War; a member of the Essex North District Medical Society, died at his home in Lawrence, Mass., May 3, aged 59.

Ole S. Merager, M.D. Sioux City College of Medicine, 1899, a member of the American Medical Association, and of the Seventh District Medical Society of South Dakota, died recently at his home in Sioux Falls from pneumonia.

Augustus F. W. Reimer, M.D. University of Göttingen, Germany, 1860, some-time coroner of Queen's County, N. Y., died at his home in College Point, N. Y., April 29, from Bright's disease, after an illness of six weeks, aged 66.

Robert M. Price, M.D. Baltimore Medical College, 1861, who retired from practice in 1884; state fire marshal of Maryland died at his home in Centerville, April 30, from pneumonia, after an illness of six days, aged 62.

Henry C. Whitehead, M.D. Vanderbilt University, Nashville, 1893, for several years city physician of Fort Worth, Texas, died at his home in that city, from consumption, April 22, after a prolonged illness, aged 43.

Emma L. McCollum Clawson, M.D. University of Michigan, Ann Arbor, 1891, of Battle Creek, Mich., a member of the American Medical Association, died April 24, from pneumonia, at Los Angeles, Cal., aged 39.

John Antoine Gibbons, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1883, demonstrator of anatomy in that institution for three years, died from inanition at his home in Keokuk, May 1, aged 41.

Marshall O. Butterfield, M.D. Medical College of Ohio, Cincinnati, 1880, of Ross, Ohio, committed suicide at the home of his brother, near Venice, Ohio, by shooting himself in the head, May 1, aged 51.

Thomas B. Saulsbury, M.D. College of Physicians and Surgeons, Baltimore, 1882, of Towson, Md., died at the Maryland General Hospital, Baltimore, May 1, after an illness of two years, aged 53.

John Parker Holmes, M.D. Harvard University Medical School, Boston, 1888, an ophthalmologist of Boston, died at his home in West Newton, Mass., May 1, after an illness of eight weeks, aged 43.

John B. Blanton, M.D. Medical College of Virginia, Richmond, 1860, regimental surgeon in the confederate service, died at his home in Chico, Texas, April 25, after a prolonged illness, aged 65.

Elias B. Herr, M.D. New York University, 1854, during 1869 and 1870 a member of the Pennsylvania legislature, died at his home in Lancaster, Pa., April 28, from organic heart disease, aged 70.

Walter Fuqua, M.D. Medical College of Virginia, Richmond, 1896, a member of the Medical Society of Virginia, died at his home in Stewartsville, Va., April 26, after a short illness, aged 32.

Louis Bedford Welch, M.D. University of Maryland School of Medicine, Baltimore, 1879, of Shirock, Pa., died, April 27, at the family residence in West Elizabeth, Pa., aged 68.

Roberts Bartholow, M.D. University of Maryland, Baltimore, 1852, died at his home in Philadelphia May 10. An extended notice will appear in the next issue of THE JOURNAL.

William J. Anderson, M.D. Faculty of Medicine of Queen's University, Kingston, Ont., 1861, died at his home in Smith's Falls, Ont., February 19, after a lingering illness.

Thomas John Chew, M.D. University of Maryland School of Medicine, Baltimore, 1868, died suddenly from apoplexy at his home in Washington, D. C., May 2, aged 57.

B. Frank Jones, M.D. Jefferson Medical College Philadelphia, 1888, died at his home in Idaho Falls, Idaho, February 3, from septicemia, after an illness of three months.

Adelaide Lorena Ainsworth, M.D. State University of Iowa College of Medicine, Iowa City, 1903, died recently from typhoid fever at her home in Fort Dodge, Iowa.

Herman L. Standinger, M.D. Humboldt Medical College, St. Louis, 1867, died suddenly at his home in St. Louis, April 24, from disease of the stomach, aged 63.

Grant H. Richtmyer, M.D. University of Vermont, Burlington, 1890, died at his home in New York City, April 21, from pneumonia, after a short illness, aged 39.

Elijah Tennant, M.D. Castleton (Vt.) Medical College, 1858, of Boone, Iowa, died at the Eleanor Moore Hospital in that city, April 28, from pneumonia, aged 67.

Daniel W. Shoemaker, M.D. Pennsylvania, 1881, died at his home in Philadelphia, from pneumonia, April 27, after an illness of one week, aged 44.

William T. Gerisch, M.D. St. Louis Medical College, 1880, Omaha, died suddenly from heart disease at his home in Omaha, April 29, aged 65.

Louis Drescher, M.D. Bellevue Hospital Medical College, New York, a retired physician of Newark, died at his home in that city, April 27, aged 84.

Duncan Fraser, M.D. Toronto University Medical Faculty, 1874, died recently at his home in Lakefield, Ont., after a short illness, aged 57.

Joseph P. Chartrand, M.D. University of the Victoria College, Cobourg, Ont., died at his home in Quebec, April 25, from spinal meningitis, aged 43.

Elisabeth Schmidt, M.D. Central College of Physicians and Surgeons, Indianapolis, 1880, died at her home in that city, March 4, aged 77.

Allen H. Farquhar, M.D. Ohio, 1868, died at his home in Ridgeville, Ind., April 21, from cancer of the stomach, after a prolonged illness.

William K. Wheat, M.D. Philadelphia College of Medicine and Surgery, 1851, retired, died at his home in Caro, Mich., May 1, aged 74.

William G. Christoe, M.D. University of the Victoria College, Cobourg, Ont., 1866, died recently at his home in Flesherton, Ont., aged 79.

William S. Balkus, M.D. College of Physicians and Surgeons, New York, 1886, died at his home in Brooklyn, N. Y., March 23, aged 42.

T. Lloyd Carey, M.D. Chicago Medical College, 1868, died suddenly at his home in Chicago, May 2, from heart disease, aged 60.

William J. Gillespie, M.D. Jefferson Medical College, Philadelphia, 1860, died at his home in Philadelphia, March 14, aged 65.

William B. Rimes, M.D. Medical College of Georgia, Augusta, 1891, of Pembroke, Ga., died in Savannah, Ga., March 21, aged 36.

Thomas A. Mulkyne, M.D., of Coffee Bluff, Ga., was drowned in Ossabaw Sound, Ga., by the capsizing of a sailboat, April 23.

Rufus K. Hinton, M.D. Jefferson Medical College, Philadelphia, 1852, died at his home in Philadelphia, April 4, aged 74.

Francois Muguet, M.D. Ecole de Médecine, Paris, France, 1843, died at his home in Louisville, Ky., March 18, aged 84.

William Merritt, M.D. University of Virginia, Charlottesville, 1856, died at his home in Roxboro, N. C., May 1, aged 79.

Charles H. Winslow, M.D., retired, of New York City, died from paralysis at New Rochelle, N. Y., April 30, aged 72.

Charles H. Crawford, M.D. Albany (N. Y.) Medical College, 1881, died suddenly at his home in Chicago, April 23.

Henry P. McDowell, M.D. Medical College of Indiana, Indianapolis, 1882, died at his home in Peru, Ind., April 24.

M. Frank Terry, M.D. Pennsylvania, 1864, died at his home in Seattle, Wash., April 23, from dropsy, aged 64.

W. R. Hurst, M.D. Medical College of Georgia, Augusta, 1854, died at his home in Decatur, Ga., May 2, aged 76.

Henry T. Murphy, M.D. Rush Medical College, Chicago, 1899, of Chicago, died recently and was buried April 18.

Eli Swarts, M.D. Ohio, 1878, died at his home in Kansas City, Kan., April 23, from erysipelas, aged 68.

William C. Rosemond, M.D. Alabama, some-time state senator, died at his home in Jasper, Ala., April 23.

James L. Adams, M.D., died at his home in Dallas, Texas, April 30, after a prolonged illness, aged 72.

Thad L. Johnson, M.D. Ohio, 1891, died at his home in Pomona, Cal., March 9, after a long illness.

W. S. Evans, M.D., a practitioner for forty years, died at his home in Marion, Ill., April 26, aged 95.

J. T. McKay, M.D., of Atlanta, Ga., died at Grady Hospital in that city, April 29, after a long illness.

A. J. Carter, M.D., died at his home in Lyndon Center, Vt., April 20, from Bright's disease, aged 62.

E. Edgar Maryott, M.D. Albany (N. Y.) Medical College, 1882, of Coxsackie, N. Y., died recently.

Algernon S. Holderness, M.D. Arkansas, died at his home in Fordyce, Ark., April 29, aged 71.

Neil Q. Pope, M.D., died, April 27, at his home in Atlanta, Ga., after a long illness, aged 45.

Horace H. McDonald, M.D., died at his home in Conyers, Ga., May 3, aged 71.

Deaths Abroad.

V. A. Ratimoff, M.D., professor of surgery at St. Petersburg for twelve years, died in the Crimea in March, after three years of illness, aged 53. He was the successor of Pirogoff and was frequently a delegate from Russia to international medical congresses, and a contributor to medical literature.

Sir Philip Crampton Smyly, M.D., F.R.C.S.I., 1863, ex-president of the Royal College of Surgeons in Ireland, honorary surgeon to the king in Ireland, senior surgeon, Meath Hospital, Dublin, died suddenly at his home in Dublin, from cerebral hemorrhage, April 7, aged 65.

Karl von Koch, M.D., died at Stuttgart, February 25, aged 75. He had been at the head of official medical affairs in Wurtemberg for many years, and inaugurated the official medical reports for the kingdom, editing the first issues.

B. T. Thierfelder, M.D., ex-professor of medicine at Rostock and author of numerous works on infectious diseases and on affections of the stomach and liver, died at Rostock, March 17, aged 79.

Augustin Reyes, M.D., one of the founders and until recently president of the present national board of health of Mexico, died at Mexico City, Dec. 18, 1903, aged 74.

F. deP. Chacon, M.D., one of the most prominent physicians and professors of Mexico, died March 20.

Jean Roger, M.D., inspector general of the French quarantine service, died recently.

Book Notices.

POLK'S MEDICAL REGISTER AND DIRECTORY OF NORTH AMERICA, Comprising List of Physicians and Surgeons, Arranged by Location, Giving Postoffice Address with Population, the School Practiced, Date and College of Graduation, All the Existing and Extinct Medical Colleges in the United States and Canada, with Locations, Officers, Number of Professors, Lecturers, Demonstrators, etc., the Various Medical Societies, Penal Reformatory and Charitable State Institutions, Hospitals, Sanitariums, Dispensaries, Asylums and Other Medical Institutions, Boards of Health, Boards of Medical Examiners, Health Officers at Principal Points, the Laws of Registration and Other Laws Relating to the Profession, Medical Journals, with Names of Editors, Frequency of Publication and Subscription Rates, Medical Libraries, Therapeutic Classification of American Health Resorts, Mineral Springs, Official List of Officers of the Medical Departments of the U. S. Army, Navy and Marine-Hospital Service, Roster of Examining Surgeons of the U. S. Pension Department, a Descriptive Sketch of each State, Territory and Province, Embodying such Matter as Location, Boundary, Extent in Miles and Acres, Latitude and Longitude, Statistics Relating to Climate, Temperature, Rate of Mortality, etc., Full Particulars of All National Associations and Societies Relating to Medicine and Surgery, and an Index to the Physicians of the United States, Arranged Alphabetically with the Number of the Page and the Column on Which the Name Appears. Eighth Revised Edition. 1904. Cloth. Pp. 3,076. Price, $10. Detroit, Baltimore, Chicago: R. L. Polk & Co.

The eighth edition of this work is now being distributed. The new edition embraces the entire North American continent, and considering the vast territory it covers and the data for so many thousands of practitioners, it is fairly accurate and complete. Many new and valuable features are noted and the publishers seem to have covered the ground so thoroughly that all information to be expected in the field it occupies has been anticipated and fully supplied. The register has grown to be a voluminous publication and it is noted that this edition comprises 3,076 closely printed pages. Its exhaustive data certainly brings the medical men of the land in closer touch than could be the case otherwise. It is a roster of the profession in the northern half of our hemisphere and it is probably the largest professional directory in the world.

DIRECTIONS FOR LABORATORY WORK IN PHYSIOLOGICAL CHEMISTRY. By Holmes C. Jackson, Ph.D., Assistant Professor of Physiologic Chemistry in the University and Bellevue Hospital Medical College. Second Edition Rewritten and Enlarged. First Thousand. Cloth. Pp. 148. Price, $1.25. New York: John Wiley & Sons. 1903.

The original edition of this work appeared last year and the author has already revised and brought it up to date in the present volume. For a student's laboratory manual it would seem to meet the requirements in the department of physiologic chemistry.

MANUAL OF CLINICAL MICROSCOPY AND CHEMISTRY, Prepared for the Use of Students and Practitioners of Medicine. By Dr. Hermann Lenhartz, Professor of Medicine and Director of Hospital at Hamburg, etc. Authorized Translation from the Fourth and Last German Edition, with Notes and Additions, by Henry T. Brooks, M.D., Professor of Histology and Pathology at the New York Post-Graduate Medical School and Hospital. With 148 Illustrations in the Text and 9 Colored Plates. Pp. xxxii 412. Cloth. Price, $3.00 net. Philadelphia: F. A. Davis Company.

Dr. Brooks has done a service by translating this German work, which has rapidly passed through three editions in its own country, and by adding to it many valuable annotations. He has also been able to insert the additions furnished by the author from the fourth German edition soon to be published. The book may be, therefore, considered well up to date and a very useful handbook in clinical microscopic diagnosis. It covers a wider range than some of the works of its class, including not only the ordinary urinary, blood and other examinations, but also the detection of parasites, macroscopically as well as microscopically.

WHAT SHALL WE EAT? The Food Question from the Standpoint of Health, Strength and Economy. Containing Numerous Tables, Showing the Constituent Elements of Over Three Hundred Food Products, and Their Relations, Cost and Nutritious Values, Time of Digestion, etc., Indicating Best Foods for All Classes and Conditions. By Alfred Andrews. Pp. 116. Price, 75 cents. New York: Health Culture Co.

The title explains the book. It is not supposed to be a medical treatise, but its elaborate tables, comparative statements, diagrams and charts will be of great value to any physician or nurse or other person interested in dietetics. It can be recommended also for popular use in the household.

CHEMISTRY, INORGANIC AND ORGANIC, WITH EXPERIMENTS. By Charles Loudon Bloxam. Ninth Edition, Rewritten and Revised. By John Millar Thomson, LL.D., F. R. S., Professor of Chemistry, King's College, London; and Arthur G. Bloxam, F.I.C., Consulting Chemist and Chartered Patent Agent. Cloth. Pp. 871. Price, $6.00 net. Philadelphia: P. Blakiston's Son & Co. 1903.

This English work, long before the public, is intended for a student's manual of chemistry and in its present form appears to be very satisfactory. Some little changes have been made in the order of the contents and some new illustrations have been added. Otherwise, aside from additions required by the progress of science, the work is not materially changed from the former editions. It is one of the better handy works for reference and study on the subject.

THE VALUE OF URETERIC MEATOSCOPY IN OBSCURE DISEASES OF THE KIDNEY. A Study in Clinical and Operative Surgery. By E. Harry Fenwick, F.R.C.S., Surgeon to and a Lecturer on Clinical Surgery at the London Hospital. Cloth. Pp. 219. Price, $2.50 net. London: J. & A. Churchill. Philadelphia: P. Blakiston's Son & Co. 1903.

This work brings out a point in genito-urinary diagnosis that is probably not familiar to most practitioners—the value of the inspection of the ureteral orifice. The author has formulated certain rules for ureteric meatoscopy and gives examples of his experience with this method during ten years. It seems to us that the author has made a very good case for this method of examination. How far it can be substituted for the more elaborate examinations or other methods is beyond our province to state.

AIR, FOOD AND EXERCISE. An Essay on the Predisposing Causes of Disease. By A. Rabagliati, M.A., M.D., F.R.C.S. Edin., Honorary Gynæcologist and Late Senior Honorary Surgeon, Bradford Royal Infirmary. Third Edition, Greatly Enlarged and Almost Entirely Rewritten. Cloth. Pp. 580. Price, $3.00 net. New York: Wm. Wood & Co. 1904.

The author of this bulky volume rather courts criticism in his preface to the work, noting the fact that since the former volume (noticed in THE JOURNAL, July 6, 1901), which was addressed to the medical profession, received a comparatively unCordial reception, he has written this work frankly for the public. It appears to us that it will receive a much less degree of attention from those to whom it is addressed than would be the case were it written more for the medical profession itself. Still, what the public can understand, physicians ought to. His ideas are well worth at least respectful consideration. The main motive of the work, as we see it, is to portray the evils of over-eating; the public certainly needs advice on this subject. The book is full of good points and while it may be that the author overestimates the rôle played by the systemic conditions due to nutritive excesses and defects, especially in their relations to infections, his ideas are such as will induce a certain amount of profitable thinking.

PEDIATRICS. Lea's Series of Medical Epitomes. A Manual for Students and Practitioners. By Henry Enos Tuley, A.B., M.D., Professor of Obstetrics in the Medical Department of Kentucky University, Louisville, Ky. Cloth. Pp. 366, with 33 Engravings. Price, $1.00 net. Philadelphia and New York: Lea Brothers & Co. 1903.

This is simply a handy epitome of the care and disorders of children and apparently meets a need, within its limitations. For a handy reference book or a condensed summary of the principal points it seems thorough and complete. Of course, it could not be substituted for the more thorough works on the subject.

THE MAN WHO PLEASES AND THE WOMAN WHO CHARMS. By John A. Cone. Cloth. Pp. 131. Price, 75 cents. New York: Hinds & Noble.

This is a delightful treatise on a practical subject. It is full of hints how to be agreeable, attractive and lovable, and

how to awaken by one's presence happy impressions in another. The physician will be glad of its advice on tact, address, optimism, etc., not only in his social duties but in his professional life.

INFANT FEEDING IN ITS RELATION TO HEALTH AND DISEASE. A Modern Book on All Methods of Feeding. For Students, Practitioners and Nurses. By Louis Fischer, M.D., Visiting Physician to the Willard Parker and Riverside Hospitals of New York City. Third Edition, Thoroughly Revised and Largely Rewritten. Containing 54 Illustrations, with 24 Charts and Tables, Mostly Original. Cloth. Pp. 357. Price, $2.00 net. Philadelphia: F. A. Davis.

We have already noticed the preceding editions of this work. The book now comes out completely revised and greatly enlarged; it is in fact practically a new book, representing modern views. It contains a large number of practical formulas, and can be recommended to those who want an up-to-date work on the important subject of infant feeding.

AN INTRODUCTION TO VERTEBRATE EMBRYOLOGY. Based on the Study of the Frog and the Chick. By Albert Moore Reese, Ph. D. (Johns Hopkins), Associate Professor of Histology in Syracuse University and Lecturer on Histology and Embryology in the College of Medicine. With 94 Illustrations. Cloth. Pp. 291. Price, $1.40. New York and London: G. P. Putnam's Sons. The Knickerbocker Press. 1904.

While this is not a medical work, it is one with which the medical preparatory student ought to be acquainted. The needs of the medical student are largely considered in compiling the text. A certain amount of knowledge of comparative embryology ought to be an important preliminary requisite to the study of medicine. In this little handbook such information is very conveniently summarized.

A MANUAL OF MEDICINE. Edited by W. H. Allchin, M.D., Lond., F.R.C.P., F.R.S. Ed., Senior Physician and Lecturer on Clinical Medicine, Westminster Hospital. Vol. V. Diseases of the Digestive System and of the Liver, Diseases of the Peritoneum and of the Vessels of the Abdomen, Diseases of the Kidneys, Diseases of the Ductless Glands. Cloth. Pp. 687. Price, $2.00. New York: The Macmillan Co. 1904.

The list of authors of this fifth volume includes such names as John Rose Bradford, J. Henry Bryant, William Hale White and other prominent English practitioners. The articles, as in the other volumes, are convenient condensed monographs of the different subjects. The work has its omissions, but they are few. There is a lack of reference to recent American work, such, for example, as that of Opie and of others on the pancreas, but this is not unusual with English works.

LA RACHITIDE E LE DEFORMITA DA ESSA PRODOTTE. By Dott. P. Mancini. Un vol. di pag. XXVIII-300, con 116 inc. L. 4. Milano: Ulrico Hoepli. 1904.

This is another of the Hoepli manuals, and is a complete little compilation and description of rachitis, which in some forms is probably more frequent in this country than many practitioners have realized. The portions on the pathologic anatomy and on treatment are also commendably full, and for the pediatrist and orthopedist surgeon, the work is of value, even in the Italian language. The bibliography is extensive in its references to European writers, but, in omitting many other authorities, it is incomplete.

LE MALATTIE DEI PAESI CALDI LORO PROFILASSI ED IGIENE CON un'appendice: *La vita nel Brasile*. By Dott. Carlo Musio. Un vol. di pag. XI-560 con 154 inc. e 11. L. 7.50. Milano: Ulrico Hoepli. 1904.

With the world-wide expansion of commercial enterprise, especially in this country, the importance of tropical medicine is becoming more and more appreciated. The comparatively few text-books on the subject are none too many, even with the addition of this little volume. Dr. Musio, the author and compiler of this work, is a physician of the Italian navy, and undoubtedly has had large opportunities for observing and studying the disorders of which he here treats. Not every one reads Italian readily, and yet it is a language of which a reading knowledge of medical matters is easily acquired. Every physician going to the tropics will do well to add this little treatise to his working library. In fact, it is not less voluminous in its way than Manson's work, though not so complete and elaborate as that of Scheube. We are sorry to see that the author, perhaps from patriotism, hurts the value of his work by still adhering to the theory of the etiologic relations of Sanarelli's bacillus in yellow fever and minimizing the importance of the researches that have exterminated the disease in Cuba. In this respect the work is behind the times, and not a safe guide.

Miscellany.

A MODERN PROFESSIONAL INSTANCE.

BY U. O. B. WINGATE, M.D., MILWAUKEE, WIS.

Dr. X was engrossed in writing notes for his lecture to his class of medical students; it was not his custom to see any one under such circumstances, as it was past his office hours. He fully understood his state of mind when thus engaged; it was difficult for him to grasp any new or foreign proposition at short notice. But a gentleman was announced from the waiting-room, with the statement that an old friend desired to see him on important matters; a man entered, well dressed, wearing gloves, and with his glasses dangling at the end of a long gold chain.

Stranger: How do you do, Doctor? I doubt if you remember me (extending his hand). You may recall the fact that I was presented to you by Dr. D of B——— at the World's Exposition at Chicago. I am Dr. P.

Dr. X: I do not recall the circumstance.

Stranger: No doubt it has escaped your memory; one can not remember so many persons, and that was some time ago. You know Dr. S and Dr. Y of Philadelphia, I presume?

Dr. X: Oh, yes; I know them well.

Stranger: I met Dr. Y a few days ago. He is much interested in the next session of the American Medical Association at Atlantic City. You expect to attend, Doctor, do you not?

Dr. X: I may, but it is too soon to say positively.

Stranger: I learn that Dr. T (naming a physician of Dr. X's city) has taken a position in the Navy. I would not suppose that he would like such a position.

Dr. X: It may seem strange, but I believe Dr. T likes the Navy better than civil practice.

Stranger: Doctor, I have called on a very unpleasant errand. I came to the city a few days ago and expected a draft to reach me here, but it has not yet arrived, and I need ten dollars very much. Can you, as a brother physician, let me have it? I must go to K——— to-night on a matter of business there, and will receive some money there, and whether the draft arrives or not, I will hand you back the loan to-morrow, as I shall come back here in the morning.

Dr. X: Certainly; I am glad to accommodate you.

Stranger: Thank you very much, Doctor. I shall not forget this kindness, and if you should not be in when I call in the morning I presume I may leave the money with your office boy, or with your servant who may open the door?

Dr. X: Certainly; that will be all right.

Stranger: Good day, Doctor; a thousand thanks. (Exit stranger.)

Dr. X (alone): Confound it! Will I ever learn anything? That fellow is a sharper; I never met him before, and probably will never see him nor my money again. Why will I continue to break my rule and let a person in when I can not defend myself nor my pocket-book? In the language of Spiegleburger, "Such a chackass vat I am!"

Another Instance—Perhaps the Same Individual.

WM. ALLEN PUSEY, M.D., CHICAGO.

About two weeks ago a man came in to see me who announced that he was a graduate from the same school and had the same specialty with me, and had come in to call on me simply to make my acquaintance. He was a dapper, well-dressed man, about forty years old, five feet six or seven inches in height and weighing probably 160 pounds. He looked rather like a foreigner, dark complexion, with dark hair and moustache, the latter charmingly waxed. He talked for a few minutes with apparent intimacy about some of the professors in my old school, said he was on his way back from Europe, and that his residence was in San Francisco, and then departed. There was so little apparent reason for his call, and he was so

smooth in manner and appearance, that I wondered what could have been the motive of his call.

About two days later he came in again and asked to see me for just a moment. With very brief preliminary excuse he told me that he wanted to borrow $10 for twenty-four hours. As he did not get the money I should have forgotten the matter, but that in talking with Dr. Frank Andrews to-day I find that he tried the same scheme, with unessential variations in details, on him, and got $5 for twenty-four hours, which has not been returned. Apparently, therefore, he is going over the country making small levies on his brother alumni and brother specialists—doubtless from all schools and in all specialties.

I recite the experience with the hope that its publication may save some one from this impostor.

MEDICAL PRACTICE IN IRELAND.

The Unfortunate Condition of Many Practitioners Under Contract Practice in Ireland.

A special commissioner of the *British Medical Journal* gives, in the issue of March 26, the history and an account of the Irish poor law medical system—and a black picture it is.

It appears that this service, which has grown up since the famine of 1847, has become a system for sweating the medical profession, and that under the more recent Irish legislation it affords a strong suggestion of the worst political practices in this country. The honest physician who wishes to do his duty finds himself subject to the beck and call of a much larger number of superiors than was formerly the case, obliged to carry out an elaborate system of clerical accounts, beside attending each year four or five hundred dispensary cases for which he is to dispense all medicine and also attending to three or four hundred patients at their homes, making an average of probably 2,000 calls, ranging over a territory of from twenty to eighty square miles in extent; all this for a pittance of about $500 a year and what little extra he can obtain from the services to the Irish constabulary and lighthouse establishment and from acting as registrar of vital statistics for the district. As the *British Medical Journal* figures it out, these qualified medical men serve the public at an average of pay that the Irish constable is allowed for horse keep and servant, and the conditions are not improving. If he asks for more he is insulted. The newer and more democratic administration under the recent Irish laws is, if anything, worse than it was under the old landlord system. Of course, if the medical man chooses to neglect his work, as some do, to devote himself to side issues he may make it profitable. According to the commissioner's report, there are persons appointed for purely political reasons who are utterly unfit for such positions. This testimony comes not only from his own personal observations, but from the statements of both the Protestant and the Catholic clergy, and, in fact, from everyone who is cognizant of the true condition of affairs. As it stands, evidently the Irish poor law medical service—which in many districts includes practically the most of the rural practice, the paying cases being taken up by physicians from the towns—is a fraud.

There is no special comfort in becoming acquainted with the evils from which our neighbors suffer, but this is an example of how the public service ought not to be administered. English writers are not, as a rule, over anxious to wash their dirty linen in public or to magnify existing abuses, but the statement published by our contemporary is apparently an honest account of a condition without any redeeming features.

The commissioner does not leave the matter with a mere statement of the conditions as they exist, hopeless as they apparently are, but points a way out by reorganization, better pay, more discrimination in the appointments and better privileges and facilities generally, all of which can be met by the curtailment in certain other expenses which are likely to be useless in the future, and with a slight addition to the taxation. It is a matter, he says, in which the welfare of the whole profession of Ireland is at stake. The number of dispensary physicians is so large that the whole medical profession is in a way in closer connection with the government than with any other country. We can not expect, however, that this reform will be brought about without outside instigation. The organized medical profession in Ireland and Great Britain will have to take up the matter and see that the wrongs of the poor law medical officers throughout the kingdom are properly redressed. The *British Medical Journal* has done well to take up their cause and this showing is, we hope, a first step to the reform that is needed.

Free Treatment.—The man who would be grossly offended if some organization should send him a bundle of groceries or a dinner at Christmas will very complacently apply next day at a dispensary or hospital for free treatment. He is quite contented to have his hospital bill and doctor's bill paid by some one else or not paid at all, as the case may be, but when it comes to groceries then his pride asserts itself. Truly, the working of the human mind is mysterious and difficult to understand.—*The National Hospital Record.*

Cattle More Important Than Man.—The following from the *Sidney* (Ohio) *Journal* is not bad, coming from a lay journal:

> The legislature would not enact a law requiring patent-medicine manufacturers and venders to print in plain words on their proprietary products a formula of their contents, but it did provide a law for such an announcement of elements in proprietary foods for animals. By this is meant feed for quadrupeds, and hence the ten thousand breakfast foods so freely advertised for animals of the man and woman kind are not included. We poor, helpless bipeds must continue to munch the hay and eat the sawdust and drink the brain liquids so liberally recommended by our church journals and ethical magazines as heretofore, in ignorance of the specific elements therein contained. Here is a case wherein the "dumb driven cattle" have the advantage of us.

Anesthesia.—The blessing of anesthesia is commonly thought to concern only the patient. To free him utterly from the awful agony of a major surgical operation was, of course, the chief and striking glory of the discoverers of anesthetics. But one is likely to forget that there are other results of more real benefit to the world which follow inevitably though more indirectly. The first of these is the vast progress anesthesia has made possible in laboratory research. Operations and experiments on living animals would not have been possible in the olden times that are common now, men could not have been found in sufficient number and with the requisite insensitiveness to carry on the experiments necessary without anesthesia. The present freedom of animals from suffering would enable even the mythical fiend of the antivivisector's imagination to do his work more easily and better. In the second place, anesthesia during surgical operations has been a not negligible cause of the establishment of the nursing profession. Women could not have been found to help the surgeon under the old conditions. Thirdly, anesthesia has enabled the profession to do away with the former absolute necessity of the utmost quickness in operation. The result was a haste that made the best operations impossible. The mortality of anesthetic operations must be a hundred times better than when the patient writhed and begged for mercy.—*American Medicine.*

An Arctic Health Resort.—It is stated that a health resort is to be established in Lapland. It is proposed to erect a sanatorium on the shores of Lake Torne, a long and beautiful sheet of water at Wassijaure, near the end of the Ofoto railroad. That railroad, it may be mentioned, has only one station in a distance of 121 miles. There is no human dwelling near that station, which is on the line between Sweden and Norway, and was erected solely for the requirements of the customs office. Except for a small settlement at Wassijaure, the only sign of human existence in the district is the occasional passage of a few Laplanders with their herds of reindeer. Apart from the scenery, the inmates of the Arctic sanatorium will have no external object of interest but a scientific station which has been erected with the help of private subscriptions by men of science. The work pursued at the station includes biological, geological, botanical and entomological and other investigations conducted during the summer, and meteorological, magnetic and other observations made at all seasons. The station is a solidly built block-house containing seven rooms, and it is proposed to build the sanatorium in the same way. The Arctic health resort would seem to offer ideal conditions for persons suffering from neurasthenia who require quiet and rest.—*Brit. Med. Jour.*

Use of Alcohol.—Within our profession the attitude toward alcoholics has been modified. We do not prescribe them any more indiscriminately and in as large quantities as was the custom formerly, but only in accordance with exact indications and in medicinal amounts. In the personal use of alcoholic stimulants, physicians have improved, probably in keeping with improved public sentiment. The doctor, whom it was hard to find entirely sober and of whom his admirers used to boast that he was just as good drunk as sober—true, only the proper statement would have been, just as bad sober as drunk—is seldom heard of, left here and there as a relic of the past. The great majority of our profession are temperate men, earnest, high-minded co-workers for the advancement of humanity.—*Wisconsin Med. Record.*

Association News.

THE SCIENTIFIC EXHIBIT AT ATLANTIC CITY.

Brief Resume of this Display of Pathologic Specimens, etc.

Four years ago the first Scientific Exhibit of the Association was inaugurated at Atlantic City. It was the distinctive feature of that memorable meeting. The practical benefits of the exhibit idea have been appreciated by everyone. Experience has shown the desirability of attaining two important ends: First, there should be each year the complete illumination of only a few pathologic topics, rather than a miscellaneous collection of specimens. Let the phases chosen for illustration be those of live interest to the profession, and such as are likely to be prominently considered in the Section work. Secondly the specimen groups should be demonstrated by competent persons at stated hours indicated on the official program. For the past five years those most interested in securing greater practical efficiency of the exhibit have striven for the attainment of these objects.

The coming session offers a flattering prospect of their realization. Demonstrations will be made on Wednesday, Thursday and Friday afternoons, in the Scientific Exhibit Hall, by William H. Welch, W. T. Councilman, Alfred Stengel, W. M. L. Coplin, Harvey W. Wiley, M. J. Rosenau, Henry Christian and others. The chief topics of demonstrations are as follows: Lantern demonstrations of recent work at Harvard on variola, vaccinia, scarlatina, Aleppo boil, diphtheria and typhoid; tuberculosis in all its phases, human and animal; arteriosclerosis and allied organic lesions; heart lesions; yellow fever; adulterated food products; new physiologic apparatus; miscellaneous exhibits.

Although in point of size the Scientific Exhibit will not equal those previously given, its practical effectiveness as a teaching factor will undoubtedly be greater. All exhibits should be in Atlantic City by Saturday or at latest Monday preceding the session. They should be addressed to Frank B. Wynn, Director of the Scientific Exhibit, Young's Pier.

FRANK B. WYNN, Director.

Slight Modification of Railroad Rate Conditions.

The Trunk Line Association announces that tickets to Atlantic City will be sold June 1, in addition to June 2, 3, 5

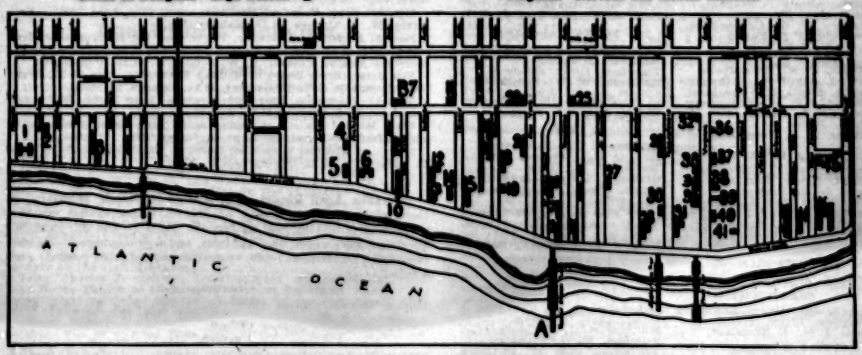
MAP OF PART OF ATLANTIC CITY, SHOWING MEETING PLACES AND HOTELS.

SECTION MEETING PLACES.

General Sessions—Young's Pier. A
Registration Bureau—Young's Pier. A
Practice of Medicine—Young's Pier.
Scientific Exhibit—Young's Pier.
Diseases of Children—Young's Pier.
Surgery and Anatomy—Steel Pier.
Ophthalmology—Steel Pier.
Obstetrics and Diseases of Women—Steel Pier.
Laryngology and Otology—Steel Pier.
Hygiene and Sanitary Science—Garden Hotel.
Stomatology—Inlesworth Hotel.
Nervous and Mental Diseases—Brighton Casino.
Cutaneous Medicine and Surgery—Shelburne Hotel.
Materia Medica, Pharmacy and Therapeutics—Young's Hotel.
Pathology and Physiology—Green's Hotel.
House of Delegates—High School. B

SECTION HEADQUARTERS.

Marlborough—General Headquarters.
Shelburne—Cutaneous Medicine and Surgery.
Dennis—Diseases of Children.
Seaside—Ophthalmology.
Strand—Laryngology and Otology.
St. Charles—Obstetrics and Diseases of Women.
Inlesworth—Stomatology.
Haddon Hall—Surgery and Anatomy.
Inlesworth—Surgery and Anatomy.
Traymore—Practice of Medicine.
Garden—Hygiene and Sanitary Science.
Windsor—Pathology and Physiology.
Young's—Materia Medica, Pharmacy and Therapeutics.
Brighton—Nervous and Mental Diseases.



32 Albermarle.	16 Champlain.	37 Grand Atlantic.	10 Marlborough House.	31 Seaside.
30 Altamont-Craig Hall.	6 Chatham.	26 Green's.	37 New England.	5 Shelburne.
22 Archdale.	1 Chelsea.	28 Haddon Hall.	30 New Hygeia.	34 Shoreham.
4 Arlington.	21 Chester Inn.	9 High School.	32 Ponce de Leon.	44 St. Charles.
35 Belmont.	6 Dennis.	34 Holmhurst.	42 Raleigh.	20 Strand.
39 Berkshire Inn.	25 Elberon.	41 Imperial.	45 Rittenhouse.	14 Traymore.
18 Bancobel.	11 Garden.	40 Inlesworth.	17 Roxborough.	33 Wiltshire.
23 Bouvier.	3 Gladstone.	19 Kenilworth Inn.	46 Rudolf.	15 Windsor.
12 Brighton.	9 Glaslyn.	43 Loraine.	3 Savoy.	24 Young's.
13 Brighton Casino.				

(For list of rates at the hotels, see THE JOURNAL April 30.)

and 6 as previously announced. Further, stop-over will be allowed at Philadelphia on the going trip within the limit of June 6, provided that the ticket is deposited at the Philadelphia office immediately on arrival. In the Central Association tickets will be sold May 31 also.

NEW MEMBERS.

List of new members for the month of April, 1904:

ALABAMA.

Hagood, J. W., Pratt City.
Jones, Julius, Rockford.

ARKANSAS.

Flinn, B. W., Little Rock.
McKinney, Asbury, Corning.
Thomason, H. E., Siloam Spring.
Toland, W. H., Mineral Springs.
Inman, M. M., Quitman.

CALIFORNIA.

Brighouse, H. E., San Francisco.
Jelle, Eugene, San Francisco.
Seymour, F. A., Los Angeles.
Nusbaumer, P. S., Oakland.
Anderson, Annie M. S., Mill Valley.

COLORADO.

Bennett, Albert S., Denver.
Rover, H. W., Denver.
Black, Herbert A., Pueblo.

CONNECTICUT.

Sullivan, J. F., New Haven.
Flynn, Jas. H., New Haven.

DELAWARE.

Lowber, Alex., Wilmington.

DISTRICT OF COLUMBIA.

Balch, Alfred W., Washington.
Wells, Walter A., Washington.
Greene, Louis S., Washington.

FLORIDA.

Hamblin, A. C., Tampa.
May, Robt. L., Jacksonville.
Bowen, Frederick, Jacksonville.
Andrade, Eduardo, Jacksonville.
Phillips, N. D., Gainesville.

GEORGIA.

Davidson, Albert A., Augusta.
Lyle, Wm. C., Augusta.

IDAHO.

Gill, J. W., Mackay.
Alley, J. N., Lapwai.

ILLINOIS.

Fairbrother, H. C., E. St. Louis.
Beedy, Ernest S., Bloomington.
Finnell, Jos. J. L., Peoria.
Wallace, Jeannette C., Peoria.
Yates, J. N., Chicago.
Pitkin, Alice F., Chicago.
Burry, Jas., Chicago.
Gregory, W. G., Cave-in-Rock.
Griswold, C. A., Fulton.

INDIANA.

Pfaffin, C. A., Indianapolis.
Bitting, Arvill W., Lafayette.
Young, Simon J., Valparaiso.
Rieman, Wm. H., Millersburg.
Clark, J. T., Hammond.
Wood, James M., Greensburg.
Axline, J. A., Noblesville.

IOWA.

Decker, Geo. E., Davenport.
Albert, Henry, Iowa City.
Park, L. E., Tracey.
Waterbury, Chas. A., Waterloo.
De Lano, Albert H., Lone Tree.
Eglaff, Wm. J., Mason City.
Werkman, D. J., Hull.
Lyon, Paul Hiffy, Ridgeway.

KANSAS.

Brierley, J. H., Glasco.

KENTUCKY.

Morris, John Mason, Louisville.
Swetnam, Elmer, Yocum.
Sams, J. W., E. Bernstadt.

LOUISIANA.

Sims, Chas. C., Dixie.

MAINE.

Clough, Herbert R., Bangor.
Woodside, Albert, Rockland.
Giddings, Wooster P., Gardiner.

MARYLAND.

Scholl, Geo. Barr, Baltimore.
Opie, Eugene L., Baltimore.

MASSACHUSETTS.

Everett, E. E., Boston.
Pratt, Jos. H., Boston.
Olin, P. F., Southbridge.
Estabrook, Chas. T., Worcester.
Knickerbocker, Percy G., Allston.
Brown, W. A., Worcester.
Leen, Thos. F., Charlestown.

MICHIGAN.

Yutzy, Simeon M., Ann Arbor.
Cooley, T. B., Ann Arbor.
White, Julia A., Battle Creek.
MacMillan, J. A., Detroit.
Bagshaw, David E., Saginaw.
Sharpe, Walter R. T., Romeo.
Belknap, Fred R., Benton Harbor.
MacKlenzie, Archie C., Mio.
O'Neil, Chas. H., Frederic.
Harris, L. A., Gaylord.
Insley, Stanley N., Grayling.
Guilds, Andros, Chelsea.

MINNESOTA.

Cameron, Wm. G., Staples.

MISSISSIPPI.

Harrison, W. H., Tutwiler.

MISSOURI.

Dandurant, L. J., St. Joseph.
Rush, Wm., St. Louis.
Babler, Edmund A., St. Louis.
Miller, S. H., Joplin.
Lee, Bert J., Norborne.
Barney, Reuben, Chillicothe.
Greene, Chas. F., Poplar Bluff.

NEBRASKA.

Miller, Harold B., Lincoln.

NEW HAMPSHIRE.

Gallinger, Ralph E., Concord.

NEW JERSEY.

Walling, W. H., Atlantic City.
Shera, Geo. W., Jersey City.
Kelchner, Wm. J., Camden.
Steiner, Edwin, Newark.
Brooke, Wm. W., Bayonne.
Bennett, John W., Long Branch.
Tomlinson, Joseph, Bridgeton.

NEW YORK.

McKernen, J. F., New York City.
Foster, Gard W., Clyde.
Allen, G. E., Clyde.
Rusk, G. Y., New York.

NORTH CAROLINA.

Russell, E. B., Charlotte.
Monk, H. L., Spencer.
Trantham, B., Salisbury.
McKenzie, W. W., Salisbury.

NORTH DAKOTA.

Weible, Ralph E., Fargo.

OHIO.

Kramer, S. T., Cincinnati.
Hay, C. H., Cleveland.
Jerome, M. A., Toledo.
Graber, C. Lee, Mt. Eaton.
Mabry, Wm. C., Columbus Barracks.
Culbertson, L. B., Zanesville.

OREGON.

Hutchinson, Woods, Portland.

PENNSYLVANIA.

Bulford, D. N., Allegheny.
Robertson, Stewart, Allegheny.
Vaux, Geo. H., Pittsburg.
McLenahan, T. M., Pittsburg.
Diller, Theo., Pittsburg.
Milligan, S. C., Pittsburg.
Robinson, W. H., Pittsburg.
Stillwagon, Chas. H., Pittsburg.
Hall, Jr., H. M., Pittsburg.
Cartwright, H. B., Pittsburg.
Matson, E. G., Pittsburg.
Milligan, Robt., Pittsburg.
Neff, E. L., Pittsburg.
Buchanan, J. J., Pittsburg.
Elliott, F. B., Pittsburg.
Farr, Clifford B., Philadelphia.
Butts, H. J., Philadelphia.
McDaniel, E. L., Philadelphia.
Davis, Edw. P., Philadelphia.
Reynolds, Anna M., Philadelphia.
Rock, John H., Philadelphia.
Manneno, J. L., Philadelphia.
Devlin, Thos. F., Philadelphia.
Wood, Jr., H. C., Philadelphia.
Wood, Geo. B., Philadelphia.
Auge, Truman, Philadelphia.
Thomas, Frank W., Philadelphia.
Shoemaker, Ira G., Reading.
Bertolet, Wm. S., Reading.
Taylor, R. P., Wilkesbarre.
Warnick, J. W., Glen Hasle.
Clark, H. E., Sheridanville.
Snyder, W. J. K., Philadelphia.
Stewart, S. C., Clearfield.
McDowell, C. F., New Castle.
Lajeas, Geo. T., Conshohocken.
Colcord, A. W., Clairton.
McClymonds, H. S., Wilkinsburg.
Blachly, O. L., Wilkinsburg.
Shaw, Farnham H., Wellsboro.
Park, W. E., Nelson.

RHODE ISLAND.

Griffin, C. H., Providence.
Pitts, Herman C., Providence.
Fisher, A. Arbuckle, Providence.
Doten, Carl K., Providence.

TENNESSEE.

Wert, B. S., Chattanooga.
Paschal, Geo. C., Arrington.

TEXAS.

Clifford, Geo. C., San Antonio.
Bilem, M. J., San Antonio.
Dorsett, Thos., Bryans Mill.
Smartt, Marcus P., Moody.
Hamilton, Ernest H., Longview.
Garrett, P. D., Gainesville.

UTAH.

Skeen, Jr., Lyman, Ogden.

VERMONT.

Breitling, Jos. C., Lunenburg.
Dill, Geo. H., Proctorsville.
Hill, A. C. S., Winooski.

VIRGINIA.

Robinson, Robt. W., Danville.
Hamner, Geo. P., Nelly's Ford.
Saunders, W. H., Gate City.

WASHINGTON.

Opsvig, P. L., Everett.
Burns, J. B., N. Yakima.

WEST VIRGINIA.

Friedenwald, Edgar B., Eskdale.

WISCONSIN.

Barckmann, H. C., Milwaukee.
Peehn, F. G., Corliss.
Barber, M. C., Shullsburg.
Brown, Wm. T., Lancaster.
Reed, Flora A., Pond du Lac.

State Boards of Registration.

COMING EXAMINATIONS.

State Board of Medical Examiners of South Carolina, State House, Columbia, May 17. Secretary, S. C. Baker, Sumter.

University of the State of New York, State Medical, Homeopathic and Eclectic Boards, New York, Albany, Buffalo and Syracuse, May 17-20.

Board of Medical Examiners of the State of North Carolina, Raleigh, May 18. Secretary, G. W. Pressly, Charlotte.

Nebraska State Board of Health, June 1-2. Creighton Medical College, Omaha. Secretary, Geo. H. Brash, M.D., Beatrice.

New Mexico Board of Health, Santa Fe, June 6. Secretary, D. B. Black, M.D., Las Vegas.

Iowa State Board of Medical Examiners, June 6-7, Des Moines, June 9-10, Iowa City. Secretary, J. F. Kennedy, M.D., Des Moines.

Minnesota State Board of Medical Examiners, Capitol Building, St. Paul, June 7-9. Secretary, C. J. Ringnell, M.D., Minneapolis.

Michigan State Board of Registration in Medicine, Lansing, June 14. Secretary, B. D. Harison, M.D., Sault Ste. Marie.

Ohio State Board of Medical Registration and Examination, Columbus, June 14-16. Secretary, Frank Windeer, M.D., State House, Columbus.

Board of Medical Examiners for the State of Texas, Houston, June 15. Secretary, M. M. Smith, M.D., Austin.

Board of Medical Examiners of Maryland, Lehman's Hall, Baltimore, June 15-18. Secretary, J. McP. Scott, Hagerstown.

Missouri State Board of Health, Kansas City, June 20-22. Secretary, W. F. Morrow, M.D., Kansas City.

Medical Society of Delaware, Dover, and the Homeopathic Medical Society of Delaware State and Peninsula, Wilmington, June 21. Secretary Medical Council, P. W. Tomlinson, M.D., Wilmington.

New Jersey State Board of Medical Examiners, June 21-22, Trenton. Secretary, E. L. B. Godfrey, M.D., Camden.

Medical Examining Board of Virginia, June 21-24, Richmond. Secretary, R. S. Martin, M.D., Stuart.

State Medical Society of Pennsylvania, June 28 30, Philadelphia and Pittsburg. Secretary, Isaac B. Brown, M.D., Harrisburg.

Territorial Medical Examining Board of Oklahoma, Guthrie, June 29. Secretary, E. E. Cowdrick, M.D., Enid.

Nebraska April Report.—Dr. George H. Brash, secretary of the Nebraska State Board of Health, reports that at the written examination held at Lincoln, April 21 and 22, 1904, 90 questions were asked on 8 subjects, and a percentage of 75 was required. Of the 21 who were examined, 16 passed and 5 failed.

PASSED.

Lincoln Medical College (Eclectic), (1904)	90.1, 81, 75.3, 85.1, 75.3, 86.1, 75.6, 84, 75.8, 84.8, 79.1, 75.6, 81.7, 87.	82.7,
Bellevue Hospital Medical College	(1870)	84.1

FAILED.

Lincoln Medical College (Eclectic), (1904), 57.1, 71.5, 72.5,		73.2
Ensworth Medical College	(1904)	69.3

Indiana January Report.—Dr. W. T. Gott, secretary of the Board of Medical Registration and Examination of Indiana, reports that at the written examination held at Indianapolis, Jan. 12, 13 and 14, 1904, 130 questions were asked on 18 subjects, and a percentage of 75 (with no one subject below 40 and no two below 50 per cent.) was required. Of the 57 who

were examined 46 passed, 9 failed, and 2 did not complete the examination.

PASSED.

College.	Year Grad.	Per Cent.
University of Louisville.....(1902) 89.8, (1903)		89.8
College of Physicians and Surgeons, Chicago, (1899) 91.1, (1902) 86.2, (1903) 90.3, (1903) 85.		
Hahnemann and P. and S., Chicago.....(1899 and 1901)		84.7
Illinois Med. Coll. (1903) 88.2, 87.5, 81, 78.7, 89.5,	(1902) 84.8,	84.7
Kentucky University.....(1902) 81.3,	(1903)	88.0
Rush Med. Coll., Chicago (1899) 85.5, (1903) 91.6, 87,		88.9
University and Bellevue Hospital Med. Coll.....(1899)		88.1
University of Pennsylvania.....(1902)		86.8
Dunham Medical College.....(1902)		87.6
Cleveland College of Phys. and Surgs., (1899) 77.4, (1901) 77.3, (1902) 77.8.)		*81.6.
Kentucky School of Medicine.....(1903)		84.6
Eclectic Med. Coll., Indiana.....(1903) 79.8,		†79.8
University of Michigan.....(1902) 87.1,	(1903)	90.3
N. Y. Homeopathic Med. Coll.....(1899)		84.7
Coll. of Phys. and Surgs., Baltimore...(1878) 79.6,	(1903)	83.3
Columbia University.....(1901)		90.6
Hospital Coll. of Med., Louisville.....(1900)		90.0
Georgetown University.....(1900)		90.0
University of Buffalo.....(1901)		76.5
University of Minnesota.....(1902)		82.3
Medico-Chir. Coll., Philadelphia.....(1903)		83.8
Trinity Medical College, Toronto.....(1903)		94.3
Western Medical University.....(1904)		92.0
Medical Commission of Berlin.....(1902)		77.5
Vienna University.....(1897)		87.7

FAILED.

University of Louisville.....(1899)	76.5
Kentucky School of Medicine.....(1902)	†61.4
Hospital Coll. of Med., Louisville.....(1902) 82.5, (1903)	85.0
Louisville Med. Coll.....(1901) †77.7, (1903)	†73.3
Columbus Medical College.....(1902)	†80.3
Eclectic Medical Institute.....(1903)	†70.0
University of Hungary.....(1904)	72.2

INCOMPLETE.

University of Illinois (Coll. of P. and S.).....(1903)	....
Medical College of Ohio.....(1897)	....

*Fifth examination. ‡Second examination. †Third examination.

Connecticut March Report.—Dr. C. A. Lindsley, New Haven, secretary of the Connecticut State Board of Health, reports for the committee of the Connecticut State Medical Society, that at the written examination held at New Haven, March 8 and 9, 1904, 80 questions were asked on 10 subjects, and a percentage of 75 was required. Of the 21 who were examined 16 passed and 5 failed.

PASSED.

College.	Year Grad.	Per Cent.
University of Pennsylvania.....(1902) 75.6,	(1903)	78.3
Coll. of P. and S., New York (1881) 74.2,	(1900) 84.8, (1901)	82.5
University of Naples, Italy.....(1898)		76.5
Coll. of P. and S., Baltimore.....(1903)		79.1
N. Y. University and Bellevue Hospital.....(1903)		78.5
University of Virginia.....(1899)		82.5
Yale University.....(1902) 77.5,	(1903) 78.7,	78.5, 83.9
Tufts Medical College, Boston.....(1902)		76.1
Boston University.....(1903)		80.1

FAILED.

Dartmouth Medical College.....(1873)	60.8
Yale University.....(1903)	69.0
Univ. of Naples, Italy.....(1901) 55.6,	(1902) 67.5
Hahnemann Medical College, Chicago.....(1873)	34.5

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, week ending May 7, 1904:

Mason, Chas. F., surgeon, granted four months' leave of absence to take effect on or about June 1, 1904.

Mann, Louis M., deputy surgeon general, sick leave further extended thirty days on surgeon's certificate of disability.

Ford, Clyde S., asst.-surgeon, leave of absence extended ten days.

Beak, S. Davis, Landersdale, Clarence E., Rietz, Hugo C., Waddell, Ralph W., Ware William H., and Wing, Franklin P., contract dental surgeons, will be relieved from duty in the Philippine Division on or about July 1 and sent to duty in the United States.

Mason, George L., and Whitaker, Jesse C., contract dental surgeons, will be relieved from duty in the Philippine Division on or about August 17 and sent to duty in the United States.

Wolven, F. Homer, contract dental surgeon, will be relieved from duty in the Philippine Division on or about September 6 and sent to duty in the United States.

Long, Charles J., contract dental surgeon, will be relieved from duty in the Philippine Division on or about September 17 and then permitted to return to the United States by the Suez route, with leave of absence for three months.

Oliver, Robert T., contract examining and supervising dental surgeon, will be relieved from duty in the Philippine Division on or about October 17 and sent to duty in the United States.

Craig, Samuel J., contract dental surgeon, ordered from Ord Barracks, Cal., to temporary duty at Fort Rosecrans and San Diego Barracks, Cal.

Stoney, Randell C., contract surgeon, granted an extension of one month to his leave of absence from Fort Hamilton, N. Y.

Navy Changes.

Changes in the medical corps, U. S. Navy, for the week ending April 30, 1904:

Hull, H. F., asst.-surgeon, ordered to the Naval Hospital, Naval Training Station, Newport, R. I.

Wilcox, G. L., asst.-surgeon, ordered to the Naval Hospital, Philadelphia.

Brown, H. L., asst.-surgeon, detached from the Naval Museum of Hygiene and Medical School, Washington, D. C., and ordered to the *Lancaster*.

Langhorne, C. D., P. A. surgeon, ordered to continue on duty on the *Monongahela* at the Naval Station, Guantanamo, Cuba.

Wheeler, L. H., May, H. A., Bolknap, J. L., and Flint J., asst.-surgeons, appointed asst.-surgeons, with the rank of lieutenant, junior grade, from April 22, 1904.

Marine-Hospital Service.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service, for the seven days ended May 5, 1904:

Pettus, W. J., asst.-surgeon general, leave of absence for seven days granted by Bureau letter of April 25, 1904, amended so as to be for three days from April 26.

Bawtelle, H. C., surgeon, granted leave of absence for five days from May 6.

Stoner, G. W., surgeon, five days' leave of absence from April 29, 1904, under Paragraph 189 of the Regulations.

Carter, R. H., surgeon, to report at Washington, D. C.

Carmichael, D. A., surgeon, granted leave of absence for fifteen days from May 12.

Young, G. B., P. A. surgeon, two days' leave of absence from April 28, 1904, under Paragraph 189 of the Regulations.

McMullen, John, P. A. surgeon, granted leave of absence on account of sickness for seven days from April 21, 1904, under Paragraph 191 of the Regulations. Granted extension of leave of absence on account of sickness for ten days from April 28.

Burkhalter, J. E., asst.-surgeon, granted leave of absence for four days from May 4.

Boggess, J. R., asst.-surgeon, to proceed to Newport News, Va., for special temporary duty.

Balmer, T., asst.-surgeon, relieved from duty at Stapleton, N. Y., and directed to proceed to Philadelphia, Pa., and report to medical officer in command for duty.

Stiles, C. W., zoologist, to proceed to Missoula, Mont., for special temporary duty.

Sternam, C. C., pharmacist, granted leave of absence for eight days from May 26.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the period from April 29 to May 7, 1904:

SMALLPOX—UNITED STATES.

California: Los Angeles, April 8-22, 23 cases, 6 deaths.
Colorado: Denver, Feb. 27-April 16, 5 cases.
Delaware: Wilmington, April 23-30, 1 death.
District of Columbia: Washington, April 23-30, 3 cases.
Illinois: Chicago, April 23-30, 6 cases.
Kentucky: Covington, April 23-30, 4 cases; Louisville, April 16-23, 4 cases.
Louisiana: New Orleans, April 16-30, 11 cases, 4 imported.
Maryland: Baltimore, April 23-30, 1 case.
Michigan: Detroit, April 23-30, 6 cases; at 97 localities, April 16-23, present.
Nebraska: Omaha, April 23-30, 4 cases imported: South Omaha, April 16-23, 1 case imported.
New Hampshire: Manchester, April 23-30, 2 cases.
New Jersey: Camden, April 23-30, 1 case.
New York: Niagara Falls, March 5-12, 3 cases.
Ohio: Cincinnati, April 15-29, 14 cases; Cleveland, April 22-29, 1 case; April 23-30, Dayton, 5 cases, 2 deaths; Toledo, 1 case.
Pennsylvania: April 23-30, Johnstown, 4 cases, 1 case imported; Philadelphia, 23 cases, 8 deaths; Pittsburg, 4 cases; Titusville, April 16-30, 23 cases.
South Carolina: Charleston, April 16-30, 6 cases, 1 death.
Tennessee: April 23-30, Memphis, 27 cases; Nashville, 6 cases.
Wisconsin: Milwaukee, April 23-30, 18 cases.

SMALLPOX—INSULAR.

Philippine Islands: Manila, March 5-12, 1 case.

SMALLPOX—FOREIGN.

Austria: Prague, April 8-16, 13 cases.
Belgium: Antwerp, April 2-16, 44 cases, 20 deaths; Brussels, April 9-16, 1 death.
Brazil: Bahia, April 2-9, 1 case.
Colombia: Barranquilla, April 11-17, 3 deaths.
France: Paris, April 8-16, 22 cases, 1 death.
Great Britain: Dundee, March 26-April 16, 6 cases; Glasgow, April 15-22, 43 cases, 8 deaths; Leeds, April 9-23, 6 cases; London, April 2-16, *62 cases, 4 deaths; April 8-16, Edinburg, 5 cases; *Week ended April 2, 1904, cases 42, deaths 8, erroneously reported in previous report.
Hull, 6 cases; Leith, 3 cases; Manchester, 4 cases; Newcastle-on-Tyne, 11 cases; Nottingham, 6 cases; Sheffield, 6 cases; South Shields, 5 cases.
India: Bombay, March 30-April 5, 24 deaths; Karachi, March 26-April 2, 12 cases, 2 deaths.
Italy: Catania, April 14-21, 1 death.
Japan: Nagasaki, March 21-31, 4 cases, 5 deaths.
Java: Batavia, Feb. 7-March 19, 35 cases, 4 deaths.
Malta: March 26-April 2, 1 case.
Mexico: City of Mexico, April 10-17, 3 cases, 2 deaths; Tampico, April 16-23, 1 death; Torreon, April 17-23, 14 cases, 14 deaths.
Netherlands: Amsterdam, April 9-23, 2 cases.
Russia: Moscow, March 6-April 9, 13 cases, 3 deaths; St. Petersburg, April 2-9, 11 cases, 2 deaths.
Turkey: Beirut, April 2-16, present.

YELLOW FEVER.

Colombia: Barranquilla, April 11-17, 1 death.

Costa Rica: Alajuela, to April 24, 11 cases, 6 deaths.
Ecuador: Guayaquil, March 26-April 2, 7 deaths.
Mexico: Merida, April 17-23, 1 case, 1 death.

CHOLERA—INSULAR.

Philippine Islands: Provinces, March 5-12, 22 cases, 9 deaths.

CHOLERA—FOREIGN.

India: Madras, March 26-April 1, 2 deaths.
Turkey: March 5-12, Bagdad, 16 cases, 7 deaths; Bassora, 6 cases, 7 deaths.

PLAGUE—INSULAR.

Philippine Islands: Manila, March 6-12, 3 cases, 3 deaths.

CHOLERA—FOREIGN.

Australia: Cairns, to March 22, 9 cases, 2 deaths.
Egypt: March 26-April 2, 62 cases, 45 deaths.
India: Bombay, March 29-April 5, 1,135 deaths; Karachi, March 27-April 3, 360 cases, 312 deaths.

Medical Organization.

Arizona.

ARIZONA MEDICAL ASSOCIATION.—The twelfth annual meeting was held in Tucson, April 27 and 28, at which the association adopted the standard constitution and by-laws, and became affiliated with the American Medical Association.

Illinois.

PIATT COUNTY MEDICAL SOCIETY.—At a meeting held in Monticello, April 26, a county society was organized in affiliation with the state society. Dr. N. Noble Vance, Bement, was elected president; Dr. Charles M. Bumstead, Monticello, vice-president, and Dr. Brent L. Barker, White Heath, secretary.

Indiana.

DECATUR COUNTY MEDICAL SOCIETY.—This society was reorganized on the standard plan at Greensburg, April 18; Dr. John V. Schofield was elected president; Dr. James M. Wood, vice-president, and Dr. Clarence F. Kercheval, secretary, all of Greensburg.

Kansas.

MARSHALL COUNTY MEDICAL SOCIETY.—At its meeting in Marysville, April 26, the standard constitution and by-laws were adopted and the following officers elected: President, Dr. Robert Hawkins, Marysville; vice-president, Dr. John W. Chalmers, Oketo; secretary, Dr. Mowry S. Thacker, Blue Rapids; treasurer, Dr. Daniel W. Humfreville, Waterville, and delegate to the district and state societies, Dr. P. Bearne Hatch, Beattie.

KANSAS STATE MEDICAL SOCIETY.—This society has just closed the largest and most successful meeting in its history at Topeka, under the presidency of Dr. William E. McVey, Topeka. In 1901, in advance of the promulgation of the uniform plan of organization of the American Medical Association, the society adopted the constitution and by-laws of the New York association with slight modifications, and grew rapidly under it, the membership increasing to about 800. At the meeting in 1903 the council was instructed to take up the matter of adopting the plan recommended by the American Medical Association, and, if thought advisable, to report it this year in form for adoption. The constitution and by-laws, with only such verbal alterations as were necessary to adapt it to local conditions, was published in the *Kansas State Journal*, and was adopted at this meeting with much enthusiasm by a unanimous vote. The following officers were elected: President, Dr. Lawrence Reynolds, Horton; vice-presidents, Drs. Daniel E. Esterly, Topeka; Edwin T. Shelly, Atchison, and Robert J. Morton, Green; secretary, Dr. Charles S. Huffman, Columbus; treasurer, Dr. Lewis H. Munn, Topeka; librarian, Samuel G. Stewart, Topeka; editor of state journal, Dr. George H. Hoxie, Lawrence; delegate to the American Medical Association, Dr. William E. McVey, Topeka; councilors: First District, Dr. Edwin T. Shelley, Atchison; Second District, Dr. Oliver J. Furst, Peabody; Third District, Dr. Millard F. Jarret, Fort Scott; Fourth District, Dr. Edward E. Haslett, Abilene; Fifth District, Dr. Frank M. Dalley, Beloit, and Sixth District, Dr. Claude E. McCarty, Dodge City. The profession of Kansas is a live, progressive one, is fully alive to the advantages and possibilities of organization, and excellent results may be confidently anticipated in the state.

Maryland.

BALTIMORE COUNTY MEDICAL ASSOCIATION.—This association adopted the new constitution of the American Medical Association April 25.

New Jersey.

MONMOUTH COUNTY MEDICAL SOCIETY.—The annual meeting was held at Freehold, at which the following officers were elected in accordance with the uniform plan adopted by the state society and the American Medical Association: Dr. Edwin Field, Red Bank, president; Dr. Asher T. Applegate, Englishtown, vice-president; Dr. D. McLean Forman, Freehold, secretary, and Dr. Isaac S. Long, Freehold, treasurer. Delegates and censors were also elected.

Ohio.

DELAWARE COUNTY MEDICAL SOCIETY.—This society was reorganized on the standard plan, April 15, and adopted a constitution and by-laws conforming to those of the state society and the American Medical Association.

Society Proceedings.

COMING MEETINGS.

AMERICAN MEDICAL ASSOCIATION, ATLANTIC CITY, N. J., JUNE 7-10.

Illinois State Medical Society, Bloomington, May 17-19.
State Medical Association of Missouri, St. Louis, May 17-19.
Montana State Medical Association, Butte, May 18.
Kentucky State Medical Association, Lexington, May 18-20.
Iowa State Medical Society, Des Moines, May 18-20.
Ohio State Medical Society, Cleveland, May 18-20.
Indiana State Medical Association, Indianapolis, May 19-20.
New Hampshire Medical Society, Concord, May 19-20.
American Gynecological Society, Boston, Mass., May 24.
Medical Society of the State of North Carolina, Raleigh, May 24.
North Dakota State Medical Society, Fargo, May 25-26.
Connecticut Medical Society, New Haven, May 25-26.
Michigan State Medical Society, Grand Rapids, May 25-27.
South Dakota State Medical Association, Redfield, June 1-2.
American Medico Psychological Assn., St. Louis, May 30-June 3.
Amer. Laryn., Rhin., and Otol. Society, Chicago, May 30-June 2
Maine Medical Association, Portland, June 1-3.
International Assn. of Railway Surgeons, Chicago, June 1-3.
Minnesota State Medical Society, Minneapolis, June 2-3.
American Therapeutic Society, New York City, June 2-4.
American Dermatological Association, Niagara Falls, June 2-4.
Rhode Island Medical Society, Providence, June 3.
Conf. of State and Prov. Bds. of Health of N. A., Wash., June 3-4.
Indian Territory Medical Association, Holdenville, June 3-5.
American Academy of Medicine, Atlantic City, June 4-6.
Medical Society of New Jersey, Atlantic City, June 4-7.
Nat. Conf. State Med. Exam. and Lic. Bds., Atlantic City, June 6.
American Medical Editors' Association, Atlantic City, June 6.
American Assn. Life Ins. Exam. Surgs., Atlantic City, June 6.
American Gastro-Enterological Association, Atlantic City, June 6.
Nat. Assn. of U. S. Pen. Exam. Surgs., Atlantic City, June 6-7.
Association of American Medical Colleges, Atlantic City, June 7.
Massachusetts Medical Society, Boston, June 7-8.
American Orthopedic Association, Atlantic City, June 8-10.
American Urological Association, Atlantic City, June 10-11.
Medical Society of Delaware, Lewes, June 14.
Wisconsin State Medical Society, Milwaukee, June 22.

FOURTH FRENCH PERIODICAL CONGRESS OF GYNECOLOGY, OBSTETRICS AND PEDIATRICS.

Held at Rouen, April 5 to 10, 1904.

The President, Professor Richelot of Paris, in the Chair.

Pyelonephritis in Relation to Childbearing.

We learn from our foreign exchanges that the congress was opened by a comprehensive address by Leguen of Paris. He remarked that notwithstanding the number of works on this subject only 60 cases of "gravidic pyelonephritis" are on record, to which he added a number of unpublished cases. This is far below the actual frequency of the affection, as many pass unperceived and recover spontaneously after parturition. Two points are of special importance in the etiology, the frequency of dilatation of the ureters during the course of the pregnancy and the marked predilection of this dilatation for the right side. When both ureters become dilated the right one is always the most affected. This dilatation is the result of the compression of the ureter by the lower segment of the uterus pressing it against the bony rim of the pelvis. The compression of the ureter induces uronephrosis and prepares the soil for infection by the colon bacillus, if not the sole, certainly the most usual cause of these fresh infections during pregnancy.

The pyelonephritis once established may be benign so far as the woman is concerned, but it is liable to have serious consequences for the child, the more serious the younger the fetus. In treatment, the date at which the pyelonephritis commenced is important on this account. In afebrile cases medical treatment prevents severe injury from the kidney affection and may cure it completely. It is also to be given a thorough trial in febrile cases, with dilatation of the bladder as a resort later. Bilateral pyelonephritis grave enough to demand intervention should be treated by artificial delivery. When unilateral, nephrostomy is preferable during the first seven or eight months of the pregnancy. Pinard and others also relate their experiences.

Influence of Hysteropexy on Pregnancy Later.

Oui of Lille reviewed the experiences in France and elsewhere in regard to this subject, and expressed his conclusion that vagino-fixation had better be restricted to women who are not liable to bear children later. Abdominal fixation is more successful by certain technics than by others, and he thinks that fixation of the fundus (Leopold, Munde, Noble), is particularly liable to cause trouble later, especially if the fixation is made near the pubic symphysis, as it induces exaggerated anteversion and hypertrophy of the posterior wall of the uterus. In certain cases in which solid adhesions formed the uterus became twisted on its axis. These and other facts indicate that the sutures should be placed exclusively in the anterior surface of the uterus, below the insertion of the tubes, and only a small portion of the uterine wall should be included in them.

Conservative Treatment of Inflamed Annexes.

Cerné of Rouen advocated leaving one or both tubes in operating for salpingo-ovaritis. In 88 cases operated on since 1898 he left one or both tubes in 65 per cent., and only 3 of the patients required a second operation later, one for reinfection, another for pains, and another to reclose the tube. One patient succumbed to peritonitis. The only contraindications he admits are obliteration of the tube, tuberculosis, intense virulence of the infection and the approach of the menopause.

Brewer's Yeast in Leucorrhea.

Audebert of Toulouse extolled brewer's yeast as the specific for the leucorrhea of pregnant women.

Nevi Sign of Cancer Below.

Denucé of Bordeaux claimed for Trélat (1883) the priority of the discovery that numerous small nevi in a region were a presumptive sign of cancer in some organ below. Trélat applied this sign to mammary cancer only, but Denucé has found it equally instructive in malignant disease in the pelvis, and certain German writers have also called attention to it as a sign of cancer in a region. Denucé found this sign decisive in certain cases of ovarian cancer.

Frog Reflex.

Gastou of Paris described a reflex which he regards as the "genital reflex *par excellence* of the unsatisfied," that is of women or girls who from physical, moral or social reasons are, or become, *incomprises*. It is frequently encountered among neurasthenics, neuropaths, and those depressed from any cause, but belongs especially to utero-ovarian affections entailing the transient or permanent suppression of the genital functions. It is an exaggeration of the knee-jerk, a series of myoclonic spasms extending to the forearms, legs and head, resembling the movements executed by a decapitated frog when stimulus is applied to the sciatic. He calls it the "reflex cranien." It is very rarely encountered in the male subject.

Preparation for Hysterectomy.

Pauchet of Amiens extolled the satisfactory results obtained from preparing patients for hysterectomy by dieting. Gaseous distension is avoided by putting the patients on water alone for four or five days with repeated oil purges. The evil results of operating on very plethoric women are all avoided by an antifat diet and toning up the kidney and liver. For three to twelve weeks before the proposed intervention he restricts the diet to water, green vegetables and vegetable soups, oranges, etc., on which the patients lose from 20 to 60 pounds, rendering them much better subjects for hysterectomy. After the operation he insists on a strict vegetable diet, which he finds attenuates or abolishes entirely the symptoms usually observed after castration.

Polykalgia.

Langenhagen of the watering place, Luxeuil, has invented this term to include all forms of pain in the pelvis, and believes in treating it by injecting hot water simultaneously into the vagina and rectum. He ascribes the pain to congestion and its sequel, spasmodic contracture. The hot water has a marked soothing effect on these conditions especially when—as is his custom—a "living" water from a good thermal spring is used, piped directly from the spring without exposure to the air.

Other subjects discussed were "Vesicovaginal Fistulas," "Syphilis in Gynecology," etc., and a number of new appliances were demonstrated, among them a "gynecologic auto-dressing-applier," presented by Paguet of Périgueux, and an apparatus for maintaining patients in the gynecologic position, which screws on any table, presented by R. Petit, who also exhibited a simple and convenient needle-holder. The *Presse Médicale* Nos. 31 and 32, brings the most complete account of the congress to date. The next congress will be held at Alger in 1907, probably in the first week in April. Professor Queirel of Marseilles will preside.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulæ and outlines of treatment are answered in these columns without allusion to inquirer.]

Cystitis.

After thoroughly discussing the varieties, causes and symptoms of cystitis, Dowd, in the *Buffalo Med. Jour.*, states that in the treatment of cystitis the cause should be taken into consideration, the relief of symptoms, the rendering of the urine bland and unirritating, the control of the inflammatory process and the general treatment. If the cystitis is due to sounds passed, for instance, in chronic gonorrhea, the treatment should consist in thorough evacuation of the bladder and instilling into the bladder a 1-16,000 silver nitrate solution, introduced through the Ultzmann-Dowd syringe rather than through a catheter. If such a condition should become chronic and accompanied by frequent micturition, slight pain, with bleeding and acid urine, the following combination is recommended by the author:

R. Ext. hyoscyami	gr. i	|06
Ext. belladonnæ	gr. 1/6	|01
Tinct. cantharidis	m. i	|06

M. Ft. pil. No. i. Sig.: One such pill every three or four hours.

All articles of food containing uric acid or oxalic acid-producing elements should be interdicted. Irrigation should be continued every third day, increasing the silver solution gradually to 1-12,000 or 1-8,000.

In chronic inflammation of the posterior urethra, the bladder and pelvis of the kidney, where the condition has existed for a considerable length of time, the bladder should be washed with a 1-16,000 silver nitrate solution every third day, and once daily with a 1-5,000 formalin solution. If there should be a suspicion of tuberculosis present as the cause of cystitis, in addition to irrigating the bladder, creosote valerianate three minims (.20) should be given three times daily, gradually increased to ten minims (.65). If the patient does not rest well the following is advised:

℞ Ext. hyoscyami .....gr. i | 06
Ext. belladonnæ .....gr. 1/6 | 01
Morph. sulph. .....gr. 1/10 | 0065
M. Ft. cap. No. i. Sig.: One such to be given at bedtime.

All instrumental interference and bladder washing should be avoided when tuberculosis is the cause, as the symptoms are only aggravated by such procedures.

In acute inflammations of the bladder *Merck's Archives* recommends the following:

℞ Largin .....gr. iv | 25
Aquæ destil. (warm) .....Oii 1000
M. Sig.: Irrigate the bladder with this solution once daily.

To relieve the pain the following suppository is recommended:

℞ Pulv. opii .....gr. xii | 75
Pulv. camphoræ .....gr. xxx 2
Ext. belladonnæ .....gr. iii | 20
Olei theobromæ q. s.
M. Ft. suppos. No. vi. Sig.: One to be inserted at bedtime.

As an antiseptic and sedative given internally the following:

℞ Ext. belladonnæ fl. .....m. xx | 1 30
Sodii boratis .....3ii | 8
Acidi benzoici .....gr. xx | 1 30
Tinct. opii camph. .....℥iss | 45
Olei gaultheriæ .....m. xii | 75
Syrupi .....℥ii | 60
Aq. destil. q. s. ad .....℥iv 120
M. Sig.: One dessertspoonful in water four times a day. When the urine is acid the following is of service as an antiseptic:

℞ Pot. acetatis .....℥iv 15
Solut. potassæ .....℥i 4
Ext. uvæ ursi fl.
Tinct. hyoscyami
Tinct. lupulin, āā .....℥iv 15
Aquæ .....℥ii 60
Syr. zingiberis, q. s. ad .....℥viii 240
M. Sig.: One tablespoonful in water after meals and at bedtime.

As an irrigation in the chronic forms of cystitis, ichthyol is recommended as follows:

℞ Ichthyol 3iiss 10
Aquæ destil. .....Oii 1000
M. Sig.: Irrigate the bladder once daily, warm. Methylene blue has been lauded in the treatment of cystitis, given internally in three-grain (.20) doses three times a day, or locally as an irrigation in strength of 2 per cent.

Treatment of Cough.

According to Foxwell, in *Ther. Gaz.*, the irritable dry cough of gouty patients is best relieved by constitutional remedies, such as colchicum or the following combination:

℞ Aspirin
Sodii iodidi. āā .....gr. v | 30
M. Ft. cap. No. i. Sig.: One such capsule three times daily. Along with this general treatment the throat may be painted with a 5 per cent. silver nitrate solution or a ½ per cent. solution of iodin in glycerin. In laryngeal disease the cough may be relieved by an insufflation of the following powder:

℞ Iodoformi .....gr. i | 06
Morph. hydrochlor. .....gr. 1/6 | 01
Amyli q. s. ad .....gr. ii | 12
M. Sig.: To be insufflated before each meal.

This enables the patient to eat comfortably and allays the tendency to cough. If the condition be painful and acute the inhalation of the vapor from the following is valuable:

℞ Spts. chloroformi .....m. x | 65
Succi conii .....3i | 4
Glycerini acidi carbol. .....m. 1 | 3 30
Aq. bullientis .....℥viii 240
M. Sig.: As an inhalation.

For chronic tubercular ulceration of the larynx, sprays are of service. They are best employed when the patient is sitting out of doors for periods of half an hour at a time several times daily. For this purpose the author recommends a mixture of the oil of pine, eucalyptus and cassia oils with menthol and benzoin. For the frequent, dry, hacking cough of acute bronchitis some medicament is required which will moisten the tubes. For this purpose the author recommends pilocarpin in doses of grain 1/60 (.001) to 1/30 (.002) every four hours. For less urgent cases sodium iodid is perhaps the best drug given in three-grain doses six times a day.

To either of these, if the cough be extreme, a mild sedative may be added, as five grains of sodium bromid. Opium preparations should be avoided. In subacute bronchitis, where the cough is in excess of the expectoration, sodium iodid should be used combined as follows:

℞ Sodii iodidi .....gr. lxxv | 5
Ammon. carb. .....gr. xlv | 3
Tinct. scillæ .....3iiss | 10
Syr. simplicis q. s. ad .....℥ii | 60
M. Sig.: One teaspoonful every four hours in water.

Where the bronchial secretion is considerable in twenty-four hours the following is of value to clear out the tubes:

℞ Liq. strych. .....m. v | 30
Spts. ammon. arom.
Spts. etheris, āā 3ss 2
Tinct. aurantii .....m. x | 65
Aquæ q. s. ad .....℥ii 60
M. Sig.: One-half the amount to be taken and the dose repeated in two hours. In old chronic bronchitis, where the tubes produce suppurative secretion, the syrup of tar or creosote should be given, the latter given in capsule or sandwiched between bread.

In phthisis sedatives are essential. For this purpose the patient should be put to bed out of doors and given small doses of codein. If the phlegm clings to the tubes small linseed poultices should be placed to the neck and renewed every hour to render the phlegm less tenacious.

Furuncles and Carbuncles.

The following combinations are recommended by the *West. Druggist* in the treatment of boils and carbuncles:

℞ Spts. chloroformi .....℥i 30
Olei caryophylli .....gtt. lxxv 5
Creosoti .....gtt. xv 1
Lin. camphoræ .....℥ii 60
M. Ft. linimentum. Sig.: Apply locally; or:

℞ Hydrarg. salicylatis .....gr. ii | 12
Acidi salicylatis .....gr. xv 1
Spts. vini rect. 3ss 15
Aquæ destil. q. s. ad .....℥iv 120
M. Sig.: Apply locally on a compress.

At the same time one of the following combinations should be injected into the parenchyma:

℞ Acidi carbol. .....gr. i-iii | 06-.20
Sodii salicylatis
Pulv. boracis, āā .....gr. xv 1
Glycerini 3ss 2
Aq. chloroformi .....℥ii 8
M. Sig.: Ten to fifteen minims to be injected into the substance of the boil; or:

℞ Iodoformi .....gr. v | 30
Salol .....gr. viii | 50
Acidi carbol. .....gr. iss | 09
Spts. etheris 3ss 2
Spts. vini rect. 3iss 6
M. Sig.: Ten drops to be injected into the diseased tissue.

Renal and Cardiac Dropsy.

Renaut of Lyons, in *Med. Press*, recommends the following new treatment of dropsy due to kidney or heart complications:

Take one or two absolutely fresh pork kidneys, chop them up fine, and then wash them thoroughly with water. The chopped meat is then pounded up in a mortar with about twelve ounces of salt water (half a teaspoonful of salt) and allow the whole to macerate for four hours and then desalt. The entire amount to be taken during the day. In order to make it palatable the patient may be instructed to add to the solution a little warm soup. This treatment should not be continued longer than ten consecutive days, when a rest should be taken for five days and the treatment re-commenced, using fresh kidneys every day.

Olive Oil in Dysentery.

Dr. H. H. Rutherford, Med. Dept. U. S. Army, of Fort Mackenzie, Wyo., in an article in *Amer. Med.* (March 12, 1904), has given some attention to the therapy of olive oil in chronic dysentery. According to his statements, experimentation has shown that olive oil increases the flow of watery bile which acts as an intestinal antiseptic. In cases of dysentery where olive oil has been administered, the amount of bile in the feces has been increased; the number of bowel movements have decreased and improved in character; there has been a gradual cessation of the signs of fermentation in the intestinal tract along with subsidence of pain and tenderness. There has been a gain in the appetite and repair of digestive facilities and rapid gain in weight and strength. The author also states that apparently positive cures have taken place after a period of two months and upward with but few recurrences in the cases he has treated. The author goes into the history of a few cases which have undergone this treatment with very favorable results.

G. Parker Dillon, in the same periodical, states it as his opinion that the value of olive oil lies in the fact that it is an easily assimilable food. The method of carrying out the treatment is as follows:

First Period.—The patient is given one ounce (30 c.c.) of olive oil three times a day for the first three days, when the quantity is increased to two ounces (60 c.c.) three times daily, and on the sixth day the same quantity is given four times a day. During the first three days the patient is to be kept on a milk diet. During the latter half one to three ounces (30-90 c.c.) of scraped beef or its equivalent of egg albumin will be added daily. During this treatment a slight loss in weight may be temporarily noticed.

Second Period.—During this period the amount of oil is given in greater quantities (not less than three ounces—90 c.c.—three times a day without discomfort to the patient) and must be kept up for a length of time in severe and chronic cases, perhaps for two months or longer, during which period convalescence will have been established and the weight regained.

Third Period.—During this period the patient is gradually restored to a full diet and the oil decreased in amount until the ulcers have permanently healed and a recurrence not probable.

Medicolegal.

Attorney Can Not Bind County for Analysis of Stomach.—The Supreme Court of Mississippi says, in the case of Jones vs. Sunflower County, that it knows of no statute in that state enabling a district attorney to bind a county by his contract with a surgeon to make an analysis of the stomach of a corpse suspected to have been poisoned. In the particular case it wishes there was such a law. In the absence of it courts can not order an appropriation of public money.

May Testify to Results of Dissection Made by Assistant.—The Second Appellate Division of the Supreme Court of New York holds, in the personal injury case of Steinacker vs. Hills Bros. Co., that it was competent for a physician who made an amputation of a leg to direct an assistant to dissect the leg after it was removed, and to testify as to the results which he saw. It was not necessary that he should have been present during the time the dissection was actually in process; it was enough if he knew the facts to which he testified.

Having Canker Not Evidence of Having Cancer.—An applicant for life insurance told the medical examiner that he had had a canker sore on his tongue, and this fact appeared in the record of that examination. The Second Appellate Division of the Supreme Court of New York says, Peck vs. Washington Life Ins. Co., that if there was any reason to anticipate danger from such canker it was the duty of the medical examiner to have determined that fact. Because the insured subsequently developed a cancer on his tongue, and because he subsequently died from the effects of blood poisoning growing out of an operation, did not establish that he had a cancer at the time of the examination, or that he had any reason to believe that the canker sore was in fact a cancer, and the burden of proof was on the company on this proposition.

Rule Applicable to Hypothetical Questions.—The Supreme Court of Illinois says, in City of Aledo vs. Honeyman, a personal injury case brought by the latter party, that, in order to take advantage of an exception on appeal to the trial court's ruling on the objection that the facts assumed by a hypothetical question were not in evidence, counsel should have called the attention of the trial court to the particular evidence assumed in the question which was wanting. The rule applicable to hypothetical questions is that the party seeking the opinion of an expert may, within reasonable limits, put his hypothetical case as he claims it has been proved, and take the opinion of the witness thereon; leaving the jury to determine whether the case, as put, is the one proved. In this case the party suing had a right to ask the question, assuming only the elements as she claimed they appeared in the evidence; and, if the question so put did not fully and fairly cover all the points, then, on cross-examination, counsel for the city had a right to change the question so as to cover the facts which they contended were applicable to the case, and which reasonably appeared from the evidence; and, having failed to pursue that practice, they can not now complain.

Measuring Damages in Personal Injury Cases.—The Supreme Court of Rhode Island says in the personal injury case of Hill vs. Union Railway Co. that the jury having found the company guilty of negligence as alleged by the party suing, it was their plain duty to assess damages in her favor in such an amount as would fairly compensate her for the injuries sustained, together with the necessary expenses incurred in connection therewith; that is, they were bound to make her whole, in so far as money damages could do so. The court says it is aware that there is no fixed standard by which the damages can be determined in a case of this sort, and that courts do not grant new trials on the ground of inadequacy of damages unless the verdict of the jury in this regard is clearly wrong. Pain and suffering and physical disability are incapable of exact measurement by any commercial standard or rule, and hence all that can be asked or expected is that in fixing damages in such a case the jury will exercise their fair and unbiased judgment. But their plain duty is to award such an amount as will compensate the party suing for the injuries sustained. What sum will accomplish this object in a given case depends wholly on the evidence, and unless it is very clear therefrom that the jury have been influenced or controlled by other considerations, or have acted under the influence of a perverted judgment in fixing the damages, the court will not review their finding. But where it is clear that the jury either wholly misconceived their duty, or else willfully disregarded the same by paying no attention to the evidence offered on the question of damages, their verdict can not be allowed to stand.

Definition of Sodomy.—The Supreme Court of Georgia says that in the motion for a new trial in Herring vs. State, the greatest effort on the part of counsel was devoted to presenting his contention that the offense of sodomy can not be committed otherwise than per anum. The court says that it has no access to the English statutes on this subject, but that this was the construction of the common-law writers seems to be settled by the weight of authority. See 3 Russ. Crim. (6th Ed.) 250; 1 Whart. Cr. Law (10th Ed.) sec. 579; Bac. Abr. tit. "Sodomy"; Clark's Cr. Law (2d Ed.) 367, and cases cited. But the judicial determinations which actually so limit the way in which this crime may be committed are few and unsatisfactory, and the text writers just mentioned, in declaring that the offense must be committed in that part in which it is "usually" committed, seem to imply that it might be practiced in some other way. In 1 Hawk. Pleas of the Crown (which was a leading text-book at the time the first penal code of Georgia was adopted) it is said, on page 357, that: "All unnatural carnal copulations, whether with man or beast, seem to come under the notion of sodomy, which was a felony

by the ancient common law." The Penal Code of Georgia of 1895, sec. 382, defines this crime as follows: "Sodomy is the carnal knowledge and connection against the order of nature, by man with man, or in the same unnatural manner with woman." It will be noted that this definition contains no limitation as to the organ with which such unnatural connection may be made. It will also be observed that bestiality (which was, according to the common-law authorities, a form of sodomy or buggery) is omitted from the foregoing definition of sodomy, and is made a separate and distinct offense. Pen. Code 1895, sec. 384. The latter section reads as follows: "Bestiality is the carnal knowledge and connection against the order of nature, by man or woman in any manner with a beast." It is also to be noted that there is no limitation as to the means by which this crime may be committed. After much reflection the court is satisfied that, if the baser form of the abominable and disgusting crime against nature—i. e., by the mouth—had prevailed in the days of the early common law, the courts of England could well have held that that form of the offense was included in the current definition of the crime of sodomy. And no satisfactory reason occurs to the court why the lesser form of this crime against nature should be covered by the Georgia statute, and the greater excluded, when both are committed in a like unnatural manner, and when either might well be spoken of and understood as being the "abominable crime not fit to be named among Christians." Wherefore, the court holds that sodomy, as defined in section 382 of the Penal Code of 1895, is a crime which may be committed otherwise than per anum.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.
April 20.

1 *Surgery of Urinary Tuberculosis in Women. Guy L. Hunner.
1½ *Pervigilium or Long Periods of Physiologic Wakefulness. George M. Gould.
2 Family Periodic Paralysis. George E. Holtzapple.
3 Some Pulmonary Lesions Produced by the Bacillus of Hemorrhagic Septicemia of Carabao. Paul G. Woolley.
4 *Temporary Sutures for Hemostasis. William C. Wood.
5 *A Plea for the Meatus. A. Nelken.
6 Medicine an Exact Science: Query. Joseph Clements.

1.—See abstract in THE JOURNAL of January 9, p. 118.

1½. Pervigilium or Physiologic Wakefulness.—Gould points out that voluntary vigil is possible for what would be considered extreme periods and quotes the experience of several prominent physicians, among them Dr. W. L. Rodman of Philadelphia, whose experience covered eight days and nights; Dr. T. B. Greenley, who at one time went for eighteen days and nights without lying down to rest, the only sleep during that time being on horseback, and Dr. R. Matas of New Orleans, who on one occasion kept awake for fifteen days and then suffered with insomnia for weeks. It would seem that perfectly normal individuals can, under special conditions, undergo long periods of wakefulness, though not as a rule without damage.

4. Temporary Sutures for Hemostasis.—The method suggested by Wood consists in taking a temporary deep suture under the artery, either in the wound itself or above it. The suture may be of any material, even strong linen thread, which can be removed as soon as the danger of bleeding is over or the artery tied in a more regular way. Three cases are reported in which the emergency suture was employed with advantage.

5. A Plea for the Meatus.—Nelken argues against meatotomy, pointing out its inconveniences and holding that the moderately contracted meatus is made responsible for more than it should be. In the last two years, since he first began to question the expediency of the operation, he has done but one meatotomy and has failed to recognize the necessity of the procedure in chronic urethritis. By a moderately contracted meatus he means one measuring between 18 and 22 French scale. The presence of stricture does not necessitate a sacrifice of the normal orifice. When we desire to employ gradual dilatation the ordinary metal sound can be used up to the caliber of the meatus. Beyond this point dilatation can be continued with the urethral dilator. The greatest objection, in spite of the inconveniences which it produces by the irritating spraying jet of urine, is the increased liability to urethral infection; Nelken quotes Belfield in support of this view.

Medical Record, New York.
April 20.

7 Some Observations on the Surgery of the Common Duct of the Liver. William J. Mayo.
8 *Appendicitis in Children. John W. Brannan.
9 Uric Acid and Its Relation to the Clinical Manifestations of Gout and Lithemia. Robert Le Fevre.
10 *Insufficientia Pylori. Mark L. Knapp.
11 *Hemorrhage After Tonsillotomy; Its General Consideration. H. Jarecky.

8. Appendicitis in Children.—Brannan thinks that this subject is somewhat neglected in the literature. He has found only four papers on the subject. With the exception of vomiting the symptoms, especially pain and tenderness, are much less constant in children than in adults. Tenderness is to be more depended on as being objective rather than subjective. When the diagnosis is once made the treatment is generally surgical. That does not mean an immediate laparotomy, but that a competent surgeon should see the case and determine whether to operate, and at what time. He has never seen a case where operation was too early, but several where it was too late.

10.—This article appeared in THE JOURNAL, April 16, p. 1005.

11. Tonsillotomy.—Jarecky calls attention to the importance of being prepared for troublesome hemorrhages during tonsillotomy which may occur in children and which are rather frequent in adults. When they occur he suggests using a good light and cleaning the parts to ascertain the cause. He recommends morphin, if necessary, to control the pain, and says that one should never operate without being prepared for hemorrhage.

Medical News, New York.
April 20.

12 *Symptomatology, Differential Diagnosis and Course of Bronchopneumonia in Children. Matthias Nicoll, Jr.
13 *Pathology of Lobar and Bronchopneumonia in Infants and Children. David Bovaird, Jr.
14 *Treatment of Bronchopneumonia in Children. W. P. Northrup.
15 *The Behavior of the Costal Arch in Diseases of the Abdominal Organs and Its Importance as a Diagnostic Symptom. Ellsworth Eliot, Jr.
16 A New Method for Transillumination of the Stomach by Means of Fluorescent Media; the Value of Fluorescin with a Research Into Its Properties. Robert Coleman Kemp.
17 *The Scope of Physical Economics; an Inquiry Into the Possibilities of Enhancing Human Efficiency Through Physical Education. J. Madison Taylor.

12. Bronchopneumonia.—This condition is a disease of the poor and must be studied for the most part in tenements, dispensaries and infant asylums. The immense preponderance of cases occurring amid such surroundings is explained by the character of the tissue on which it is implanted and not by the germ itself. Insufficient air and sunlight, improper food, clothing, impaired health and lack of attention to the pathologic conditions of the upper air tract are here included. Nicoll has analyzed 167 cases of the so-called primary type in the New York Foundling Hospital during the past three years, and finds the clinical picture more characteristic than in the secondary type. Bronchopneumonia is generally a secondary or complicating disease. He thinks the estimate of one-third of the cases as primary is too large. It occurs—unlike lobar pneumonia—at all seasons. Males are somewhat more frequently affected than females, and 70 per cent. of the cases were in children under two years of age. The symptoms are exceedingly irregular on account of the variety of the bacteria which singly or in combination are responsible for the primary lesion and the varying amount of the lung involved. The onset is invariably sudden and it may be ushered in by vomiting, convulsions, chills, diarrhea, disturbed expiratory action, temperature elevated 4 or 5 degrees, respirations 40 to the minute or more, and the pulse 120 or over. The ratio

of respirations to the pulse approaches 1 to 3; moist râles occur over a greater part of the chest. Subcrepitant and fine râles should be diligently sought for. They are frequently heard over only a small area, at one or both bases near the spine, in the axilla, or at the apices; with consolidation there is exaggerated, diminished or bronchovesicular breathing. Considerable areas of consolidation may be found at autopsy of which there was no evidence during life except a few râles. In atypical cases the fever rises rapidly to 104 or over, and continues, with, morning remissions, for a number of days. The pulse is first rapid and strong, but later feeble. Cough may be absent and often suppressed in fatal cases. Stiffness of the neck and shoulders is marked in many epidemics and there may be muscle spasms. When a child under three years of age becomes suddenly and gravely ill, bronchopneumonia should always be thought of, even if symptoms referable to other organs, as the brain or intestines, serve to draw the attention from the lungs. If in the course of a convalescence of infectious disease the temperature suddenly rises and the pulse and respiration increase, this disorder is probably the cause. The differential diagnosis is reviewed. It may be distinguished from bronchitis of the large and medium bronchi by the lower temperature and shorter course of the latter and the absence of toxic symptoms. There is no need of any diagnosis between it and the so-called capillary bronchitis as the distinction is not a valid one. Fluid in the chest is often a complication or sequel. Bronchopneumonia is sometimes mistaken for laryngeal stenosis, but the slow, painful and characteristic respirations of the latter, the marked epigastric and sternal recessions, constitute a typical picture which should prevent mistakes. If it occurs in the course of a laryngeal diphtheria the diagnosis must be largely made on the symptoms, fever, respiration and pulse. It may lead to a mistaken diagnosis of meningitis, but the respiration in the latter is slow and usually quite unlike that of pneumonia, as is also the pulse. In obscure, acute, febrile cases in young children the possibility of bronchopneumonia should not be overlooked.

13. **Pathology of Bronchopneumonia.**—Bovaird describes the findings in cases of consolidated lung with associated pleurisy and the predominance of the pneumococcus and its bacteria.

14. **Treatment of Bronchopneumonia.**—How to care for a baby with bronchopneumonia is summarized by Northrup in the following:

1. Castor oil to clear the field of operation. It is the first aid to the injured.
2. Fresh air, cool and flowing. It reddens the blood, stimulates the heart, improves digestion, quiets restlessness, aids against toxemia. Regulate the temperature of air of the room inversely to that of the child. The patient's feet must always be warm, and the head cool.
3. Water, plenty, inside and outside. Temperature of the water as indicated by child's temperature.
4. Quiet and rest. Tranquillizing influences about patient. Undisturbed sleep.
5. Correct feedings to avoid fermentation and gas in abdomen. If there is need, high hot salines.
6. Antipyretics. Water. No coal-tar products.
7. Heart stimulants. Fresh air, hot foot-baths. Relieving tympanites and crowding. Hot foot-baths and hot salines can be given in a cold room. Both can be given under the bedclothes.

Drugs.—Whisky and strychnin. These are the first drugs mentioned in this paper, unless that household remedy, castor oil, be included. Promote general comfort in every rational way.

How to Kill a Baby with Pneumonia.—Crib in far corner of room with canopy over it. Steam kettle; gas stove (leaky tubing). Room at 80 F. Many gas jets burning. Friends in the room, also the pug dog. Chest tightly enveloped in waistcoat poultice. If child's temperature is 105 F. make a poultice thick, hot and tight. Blanket the windows, shut the doors. If these do not do it, give coal-tar antipyretics and wait.

15. **Behavior of the Costal Arch in Abdominal Disease.**—Eliot reports cases and gives a general summary as follows:

1. The symptom of costal resistance may always be elicited in the acute and subacute inflammatory processes of the contiguous underlying organs. In chronic inflammation of these same organs it is present irregularly, either generally, when the organ is increased in size, or during a transitory exacerbation of the chronic inflammatory process. In neoplasms or cysts, increased costal resistance may be obtained only when the tumor has reached a sufficient size to mechanically interfere with the movement of the arch. 2. The degree of resistance is in direct ratio to the intensity of the inflammatory process. 3. The increase of costal resistance is most marked in that segment of the costal arch which is closely situated to the original point of infection, or, in the case of neoplasm, to that part of the arch which lies over the most prominent part of the tumor. 4. Its value as a diagnostic symptom is greatest in pathologic conditions invading the upper half of the abdominal cavity, especially of the liver, the stomach, the pancreas, the gall bladder, the spleen, the duodenum, the kidneys, and in extensive aneurism of the abdominal aorta. The writer has had but little opportunity to observe this symptom in supradiaphragmatic processes. In cases of empyema the abscess cavity is generally encapsulated and does not usually occupy the lowest part of the thoracic cavity. Only when so situated is there resistance of the costal arch proper. In higher positions any difference in the rigidity of the overlying rib or ribs is very difficult to detect and unsatisfactory. 5. The presence of asymmetry in the elastic recoil is very much less frequently observed than asymmetrical increase in the costal resistance, the former being present only in cases of cysts, neoplasms and inflammatory exudates in which the acute symptoms have subsided, while it is invariably absent in all the acute and subacute inflammatory. 6. With the subsidence of the inflammatory process, whether by radical or palliative procedure, the costal resistance again returns to its normal condition. 7. The presence of this symptom is very valuable, not only in facilitating accurate diagnosis, but also in serving as a useful guide to that decision through which the inflammatory focus may be most rapidly exposed and satisfactorily treated. 8. Finally, proper and skillful technic in determining the presence or absence of this symptom may be easily acquired, and, therefore, the application of the symptom may be utilized by the general practitioner and not confined to those engaged in the pursuit of any particular specialty.

17. **Physical Economics.**—The chief objects to be attained by exercises are to produce elasticity of the hardened tissues and a capacity to relax as well as improve nutrition. Relaxation being gained and appreciated, Taylor outlines the principles of physical economics as follows:

1. To Acquire Normal Attitudes.—Few persons are free from local or general faults of posture and most have acquired deformities.
2. To Overcome Contractures.—It is rare to find one who possesses perfect mobility of limbs, or neck, or other frequently used voluntary muscles, and it is exceedingly common to find the less used joints grievously stiff and contracted, especially the hip joint and the junctures of the ribs, the origin and insertion of many muscles, deep-seated tendons and ligaments.
3. To Attain Full Flexibility of Muscles by which Alone Their Competence Is Established.—Here relaxation is an imperative condition. Also steady stretching is most effective, protracted till the tensions are overcome, or taught to overcome themselves.
4. To Acquire Accuracy in Movements.—Along with deliberation graduated increments of force should be employed, particularly in extensions, which should be from full relaxation in a parabolic curve of force to the perpendicular of extreme tension. This is the chief factor of power and on this basis alone is economy of forces to be estimated and conserved. After accuracy is attained speed may follow, and then be of some utility. It is desirable also to secure:
5. Full capacity for extension, first passive, and later active, by which the tendons are stretched to their uttermost and through this much improvement is possible, not only in the efficiency of the muscles, but also reflexly in the nutrition of the centers, is enhanced.
6. Full respiratory capacity; the basis of oxygenation in lungs as well as muscles. This may be acquired by systematic breathing, rhythmic inspiration and expiration, both increasingly, until by securing invigoration of the thoracic tissues, supplemented by the abdominal muscles and especially the diaphragm, not only is full forced inspiration accomplished, but, of equal importance, fullest expiratory emptying of the lungs. This should expel the last possible remaining complemental air from the recesses of the lungs and greatly enhance the interchange from the residual air.
7. Cardiac capacity, the heart and vessels need development: a long story and attainable through automatic movements repeated to the limit, or by movements of skill, training, balance, accuracy, variety, etc.
8. Capacity for muscular endurance, by repetition of automatic simple acts or variegated movements, such as in fencing, the various games of skill, tennis, squash, handball, etc.
9. Muscle building; of little or no use to those not young or fairly vigorous, but of great importance to those who are markedly weak at any age, provided there is no contraindication.
10. A combination of muscle-building accuracy, endurance, full muscular competence of limbs and heart from such means as fencing, wrestling, boxing or other dual contests.

It is usually sufficient for any one who desires to pursue physical economics for the purpose of acquiring full bodily efficiency, short of competitive athletics, to work mainly for elasticity and accurate tensions.

New York Medical Journal.

April 30.

18 Accuracy in X-ray Diagnosis. Russell H. Boggs.
19 *Actinic Sunlight in the Treatment of Pulmonary Tuberculosis. J. W. Kime.
20 *Epigastric Hernia. Charles Green Cumston.
21 *A Test for the Earlier Diagnosis of Uterine Cancer. F. Hurst Maier.
22 Professional Relations, Mutual and Public. John H. Neal.
23 *The Hopkins-Folin Method for the Determination of Uric Acid in Urine. W. E. Dreyfus.

19. **The Action of Sunlight in Tuberculosis.**—Kime describes the apparatus used in his sanatorium at Denver. He finds that the order of improvement in most cases is cessation of chills and of night sweats, gain in body weight, increased appetite, lessening of the diarrhea, increase of strength, decline of the fever and decrease in the number of bacilli. While the bacteria are still to be found they may disappear after the discontinuance of the treatment. He thinks the light acts as a restorative agent, tonic and tissue builder.

20. **Epigastric Hernia.**—Cumston finds that this condition is moderately frequent, more so, however, in the male sex and in the laboring classes. It may be the result of trauma, but he thinks the most frequent causal factor is certain changes in the structures of the abdominal walls. Congenital or acquired diastasis of the recti has been present or there is an abnormal relaxation of the fibrous tissue, partly congenital and partly the result of an inherent tissue weakness. It was pointed out many years ago that the fibrous tissue from the umbilicus to the xiphoid process was always thinner and broader than that below the umbilicus and that it more readily gives way. Another important factor, however, to which he attributes the hernia to a large extent is subperitoneal lipoma deposited in the region of the epigastrium having a tendency to approach and separate the fibers of the linea alba. Two cases reported were undoubtedly caused by this condition, and two others were the result of a preformed defect in the fibrous tissue of the linea alba. The contents of these hernia vary, but the omentum is usually found, and occasionally a loop of the small intestine or a portion of the large intestine. Even the stomach may form part of its contents. An epigastric hernia has a most characteristic appearance, but is often overlooked and medical treatment is too long resorted to. Strangulation is very infrequent, though it does occur. The sac will usually be found adherent to the ring and the contents more or less adherent to the sac. The proper method of examining a patient is to have him stand in an erect position with the trunk bent forward. By the act of coughing the hernia will be made to protrude and it disappears more or less completely in the recumbent position. If the intestine forms part of its contents, resonance will be obtained on percussion and the peculiar gurgle will be heard as it recedes into the abdominal cavity. Cases are reported of hernia from pregnancy and from trauma. The latter variety is not common. It would appear that the prognosis is very favorable if the condition is discovered in time and the proper treatment instituted. Trusses are of little use. The proper treatment is to operate radically; a cutaneous incision is made over the tumor, exposing the lipoma that is always present, and this is dissected out and the neck of the sac is sought for. The sac is opened and the contents, if any, are returned into the abdominal cavity. The sac is ligated behind the neck. The linea alba may be closed by any device desired, but overlapping or mattress sutures appear to be the most satisfactory.

21. **Uterine Cancer.**—According to Maier the reduced mortality from uterine cancer is chiefly due to timely operations, earlier diagnosis and more ready recourse to medical and surgical aid by the patient. In the present state of our knowledge we can conservatively accept, in the absence of a more tangible explanation, the view that trauma is often responsible for at least the propagation of, if not the cause of, the disease. The fact that women suffering from the so-called condition of "cancerophobia" are comparatively free from the disease is to be regarded as not altogether a coincidence, but as rather due to constant medical surveillance which the patient is under. Since the healthy uterus is less likely to undergo progressive malignant changes a highly important element in the prophylaxis should be to keep the uterine mucosa in as normal a condition as possible, and under no circumstances to neglect lacerations, inflammation, and erosions, especially during the menopause.

23. **Uric Acid in the Urine.**—Dreyfus thus describes the Hopkins-Folin method of determining uric acid:

(1) A solution of 1 litre volume containing 500 grams of ammonium sulphate; 5 grams of uranium acetate; 60 c.c. of 10 per cent. acetic acid; and distilled water to bring the bulk up to 1 litre. (2) A one-twentieth normal solution of potassium permanganate.

The method of procedure is as follows: Place 300 c.c. of urine in a beaker, add 75 c.c. of the ammonium sulphate reagent, and mix thoroughly. After the precipitate has settled sufficiently (say in about five minutes) filter through a double folded filter. When 250 c.c. of the filtrate has passed through, this volume is divided into two portions of 125 c.c. each, to serve as a duplicate. To each portion add 5 c.c. of concentrated water of ammonia, mix thoroughly and allow to stand over night. The precipitated ammonium urate is then transferred to a filter and washed with a 10 per cent. solution of ammonium sulphate. Then wash the precipitate with about 100 c.c. of water into the same beaker, add 15 c.c. of concentrated sulphuric acid, and immediately titrate with N/20 solution of potassium permanganate until the first permanent tinge of pink color appears. One c.c. of potassium permanganate solution equals 3.75 milligrammes of uric acid. From this calculate the amount in twenty-four hours.

A shorter process, but one which is less accurate, consists in the precipitation of uric acid with ammonium chlorid (50 grams for each 100 c.c. of urine), allowing it to stand over night, then filtering off the ammonium urate, washing with cold saturated solution of ammonium chloride, and dissolving in hot water (about 100 c.c.), containing about 15 c.c. of concentrated sulphuric acid, and titrating as before.

Boston Medical and Surgical Journal.

April 23.

24 *Surgical Anatomy of the Prostate. L. R. G. Crandon.
25 *The Gross Pathology and Mechanism of Prostatic Obstruction. Arthur L. Chute.
26 *Choice of Operation for Prostatic Hypertrophy. F. S. Watson.
27 *Results of Operations on the Prostate, Massachusetts General Hospital, from Jan. 1, 1892, to July 1, 1903. Hugh Cabot.
28 *Use of the Cystoscope in Determining What Operation is Advisable in Prostatic Hypertrophy. J. C. Balch.
29 *Brief Résumé of the Present Status of the Treatment of the Enlarged Prostate. Arthur T. Cabot.
30 *Prostatectomy—Spinal Anesthesia. F. B. Lund.

24, 25, 26, 27, 28, 29 and 30. **Prostatic Hypertrophy.**—Prostatic hypertrophy and its various relations is discussed by a number of authors. Crandon describes the surgical anatomy of the prostate and Chute the gross pathology and mechanism of its obstruction. In discussing the choice of operation Watson reviews and tabulates the results in 2,600 cases and concludes that the perineal operation done according to the best technic is the most satisfactory, and the method of choice. The suprapubic and Bottini methods both, however, have their place; the former in cases in which the very large middle lobe makes the perineal operation difficult and the Bottini operation in patients whose condition is such as to expose them to shock or post-operative pulmonary complications. If a Bottini can not be performed and something must be done for relief a palliative operation for drainage may be performed. H. Cabot summarizes the results in the Massachusetts General Hospital and Balch points out the advantages of the use of the cystoscope, especially where the galvanocautery has to be resorted to. As regards the present status of operation A. T. Cabot thinks that the Bottini with cocain anesthesia may be advisable in very feeble patients where the organs are too unsound to bear other operations, but he thinks the perineal operation is less dangerous and more sure of giving good functional results. He notices the fact that in many cases where the gland is rather blindly shelled out lacerations forming flaps in the urethra and interfering with micturition may still remain. Complete prostatectomy, however, is so well supported by evidence as the most satisfactory that it is the operation to be preferred. In some cases, however, thorough removal of the third lobe will accomplish all that is needed. The operation is one that should not be neglected. Its most rational employment is where the bladder is opened for other purposes and this condition of the prostate noticed. Its removal adds little or nothing to the danger of the operation, and there is a very fair chance of recovering the power of urination. Lund reports a case performed under spinal anesthesia by the Morton method, putting powdered cocain in a sterile syringe, withdrawal of the spinal fluid and allowing it to dissolve the cocain and then re-injecting it. The operation required the ultimate removal of the middle lobe by the suprapubic wound, and he had good results.

Cincinnati Lancet-Clinic.

April 30.

31 *Concerning the Acidimetry of the Gastric Juice. J. Henry Schroeder and Henry W. Bettmann.
32 Suppurative Diseases of the Middle Ear. Samuel Iglauer.
33 Strangulated Bowel, Laparotomy. Earl Harlan.

31. **The Acidimetry of the Gastric Juice.**—Schroeder and Bettmann have experimented with Toepfer's indicator, tropeolin, alizarin, and congo red, giving their reactions with the different acids in distilled water, the comparative sensitiveness and their end reactions, with special reference to Knapp's statement that Toepfer's test is unreliable for free HCl. From the result of their studies they find that the weak solutions of organic acids may interfere with the end reactions of these indicators. They do not think it probable that Toepfer's re-

agent will ever give positive reactions when free HCl is totally absent and in that case the free organic acids will combine with the albuminous substances, and can not be detected by Toepfer's test.

Denver Medical Times.
April.

34 *Report of X-ray Therapeutics. G. H. Stover.
35 *Volvulus of the Stomach. C. D. Spivak.

34. **X-Ray Therapeutics.**—Stover gives the report of considerable experience in *x*-ray treatment of various conditions. It is his opinion that the *x*-ray is the specific for epithelioma—better than the knife or caustics, as it does not disturb the healthy tissue, and as the final cosmetic effect is infinitely better. He does not think recurrence is any more frequent than after other methods, and would probably be found less so. If it should occur the ray can be again applied and no tissue necessarily sacrificed. In carcinoma the results are not so gratifying, especially in deep-seated ones, but he thinks the time will come when the results will be much better than now. For cancer of the breast or cancer of the internal organs surgery is the proper treatment, but it is well to use the rays before and after operation. Primary raying may destroy some outlying and but little developed invasion and help to render the tissue sterile, thus preventing infection. He has exposed his left hand considerably to the rays during the past seven years, and injuries, cuts, etc., heal up much more readily than in any other part of the body and without suppuration. He is watching the development of what one writer calls a pre-cancerous keratosis due to the *x*-ray, but so far has not seen any bad effects. In bone tuberculosis the results have been gratifying, and he hopes the results in glandular tuberculosis will continue to be good. He is not ready to say much as regards the other forms. He thinks there is too much rushing into the *x*-ray treatment, and that there will be a reaction against it, but hopes the pendulum will not swing too far, as it has established a rightful place for itself.

35. **Volvulus of the Stomach.**—Spivak remarks that volvulus is not confined to the intestines. He quotes from the literature of reported cases, 8 in number, and remarks that where adhesions, contractions and tumors exist the occurrence is explainable by some effort of the imagination, but it is hard to solve its mechanism where no organic changes are found. One thing is certain, that volvulus of the stomach is never produced spontaneously. The condition works slowly and silently for days, weeks and possibly longer. The conclusions are given as follows:

1. The occurrence of volvulus of the stomach is a possibility beyond the shadow of a doubt; it remains, therefore, for physicians to bear this condition in mind when making a differential diagnosis between pyloric obstruction, occlusion of the bowels, poisoning, cyclic vomiting, cholelithiasis, peritonitis, etc.; for surgeons to be ready to operate when necessary and not to forget to empty the stomach of its contents: . . . and, for authors to devote some space to this condition in their text-books on diagnosis and surgery. 2. Volvulus of the stomach occurs in all ages and in both sexes. 3. Digestive disorders may be considered as etiologic factors. 4. From a pathologic standpoint volvulus of the stomach may be divided into (a) that due to organic changes produced by adhesions, and (b) that in which no visible organic changes have taken place. 5. The characteristic symptoms of volvulus are: Sudden onset; distention, which commences in the left hypochondriac region, and which gradually increases in size; a tumor, which gives on percussion a tympanitic sound; vomiting or regurgitation immediately following ingestion of food or drink; no belching, no escape of flatus; inability to pass a sound into the stomach. 6. When the condition is recognized, early operative interference is indicated, and recovery is almost certain. Since the ability of turning around its axis is vouchsafed the stomach, I verily believe that the next thing we hear will be invagination of the stomach—the pylorus will slip into the funnel-shaped cardiac orifice, and for aught I know, may traverse the œsophagus and prolapse itself from the mouth. To my articles of medical faith I shall add: I believe anything one may say of the stomach.

Chicago Medical Recorder.
April 15.

36 Surgery of the Kidney. Arthur D. Bevan.
37 Examination of the Urine and Segregated Urines as a Means of Diagnosis in Surgical Diseases of the Kidney. M. L. Harris.
38 Cryoscopic Examination of the Blood and Urine as a Means of Diagnosis in Surgical Diseases of the Kidneys. Theodore Tieken.
39 The Roentgen Ray Diagnosis of Renal Calculus. Joseph F. Smith.
40 Some Newer Methods in Use in the Diagnosis of Ureteral and Renal Diseases. Louis E. Schmidt.
41 Sexual Debility. F. Krotzel.
42 *The Accessory Sinuses. W. T. Eckley.
43 Syphilitic Cases. E. A. Fischkin.
44 An Interesting Case of Inherited Syphilis. George F. Suker.
45 Present Status of the Mechanical Treatment of Spondylitis. Wallace Blanchard.
46 Straightening of the Curvatures of Tubercular Spondylitis. John Ridlon.

42. **Accessory Sinuses.**—Eckley's conclusions are in substance that: The accessory sinuses of the nose in man are phylogenetically very ancient structures and figure physiologically as feeble, subsidiary, respiratory organs. The maxillary sinus in the higher vertebrates has its prototype in the amphibian accessory nasal chamber in which it was an olfactory organ, hence, phylogenetically, the antrum in man is an obsolete organ of smell. For reasons not explained, the sinuses develop *pari passu* with the generative organs and there is evidence of an intimate physiologic relation between these two. The variations, even in healthy sinuses, are so great that it is risky to attempt any analytic classification as to size, shape or openings. For embryologic reasons each sinus is a law unto itself. The sinuses are supplied by the trifacial nerve, hence reflex phenomena between them and the peripheral cervical nerves are possible. The specialist should bear in mind the possibility to reversion to structural fixed types in the lower vertebrates. Operations on the sphenoidal sinuses are anatomically unjustifiable. A sound tooth should never be sacrificed. The nasal route of gaining entrance to the antrum is never dangerous.

Therapeutic Gazette, Detroit.
April 15.

47 *Case of Total Laryngectomy (Unsuccessful) and a Case of Abdominal Hysterectomy (Successful), in Both of Which Massage of the Heart for Chloroform Collapse Was Employed, with Notes of 25 Other Cases of Cardiac Massage. W. W. Keen.
48 Some Observations on the Surgical Physiology of the Vascular System. Geo. W. Crile.
49 *The Advantages of Abdominal Over Vaginal Hysterectomy in Carcinoma. John B. Deaver.
50 *Use of Atropin in Ophthalmic Practice. Aaron Brav.

47. **Massage of the Heart.**—The title of Keen's article explains the case, but principal stress is laid on the attempted relief by massage of the heart. He also reports another case of chloroform collapse with massage of the heart and recovery, the operator being Dr. Ingelsrud of Tromso, Norway. Keen also reviews the other reported cases, omitting, however, until the close of the article the case reported by Cohen in THE JOURNAL, Nov. 7, 1903. With this case the total number of cardiac massages to restore its action in heart failure during surgical operations is 28, with 4 recoveries by this means.

49. **Abdominal Hysterectomy.**—Deaver advocates the total ablation of the uterus by the abdominal route in early cancer of the cervix, holding that the operation is more promising than when done by the vaginal route.

50. **Atropin in Ophthalmic Practice.**—The indications and contraindications of atropin in ophthalmic practice are noticed by Brav. Among the former he includes correcting errors of refraction in patients under 40 years of age, unless there are special contraindications to its use. No other drug is as good in measuring refractive errors. In the spasms of accommodation with resulting apparent myopia, it is the drug to clear up the condition. In the treatment of convergent strabismus, due to an excessive degree of hypermetropia in its early stage, it is of value as paralyzing the accommodation, keeping the eye focused for distant vision, thus preventing undue convergence. In diagnosing posterior synechia and seclusio pupilla atropin is of considerable value. In various inflammatory conditions it is a most valuable therapeutic agent, acting as an antiphlogistic by contracting the blood vessels and a direct sedative and analgesic. In disease of the cornea of almost every type atropin is indicated, and especially in the interstitial and parenchymatous types of the disease. In corneal ulcers it is also invaluable, and it appears, according to the author, that the increase of intraocular pressure it produces in these cases is so slight that it may be overlooked when we consider its advantages otherwise. It is essential in the treatment of disease of the iris and ciliary body and of benefit in scleral wounds and recent injuries. In disease of the uveal tract, choroiditis, retinitis, it paralyzes the ciliary muscles and pre-

vents the constant pulling of these bodies forward. It is also indicated in circular iridodialysis. The contraindications are glaucoma; in all conditions with an increase of intraocular tension, in people above forty for the correction of refractive errors and in cyclitis as increasing the pain; and in ulcers of the cornea with threatening perforation the greatest caution should be used in its employment. In radial iridodialysis atropin is contraindicated. Its employment in children especially should be with care. Some people have a marked intolerance and toxic symptoms are easily produced. The preparation should not be contaminated. The solution should be neutral in reaction and not too strong, and while using it the lachrymal sac should be compressed or the lid everted. The solution should be aseptic, especially in inflammatory conditions by a fraction of bichlorid. The diagnosis should be certain and the eye should not be glaucomatous. No more than three drops daily should be instilled. It should not be used after forty-five years of age.

Ophthalmic Record, Chicago.

April.

51 Vernal Catarrh: Pathologic Study. Richard H. Johnston.
52 *Association of Cataract with Uncinariasis or Hook-worm Disease. A. W. Calhoun.
53 A Luminous Test Cabinet. Nelson M. Black.
54 *Case of Panophthalmitis Following Cataract Extraction in an Apparently Healthy Eye—Cause, Pneumococcus Infection. Hiram Woods and Richard H. Johnston.
55 *An Unusual Accident to a Glass Eye. B. L. Millikin.
56 An Adjustable Lid Speculum. Mark D. Stevenson.
57 Use of Prisms in Determining the Refraction by the Shadow. Charles D. Jones.

52. Cataract and Uncinariasis.—Calhoun calls attention to the association of cataract with hook-worm disease. He has operated on several cases within the last few months and has become impressed with the conviction that the hook-worm was the cause of the cataract and can also recall several other cataract cases in persons having similar symptoms that occurred in his practice before the recognition of the parasite.

54. Panophthalmitis Following Cataract Extraction.—Woods and Johnston report the case of a cataract extraction in an apparently healthy eye which was followed, without any obvious causes of infection, by general panophthalmitis which left the left eye a painless stump. A bacteriologic examination found the diplococcus in abundance in the pus of the affected eye. The aseptic precautions seemed to be complete and Woods asks whether a cold that the patient had six weeks before the operation could have left the organisms which at once invaded a fresh wound, and whether the case suggested the propriety of gauze covering for the mouth and nose of the operator and spectators, a point which was somewhat emphasized by Dr. Gifford at the last meeting of the American Medical Association. The pneumococcus appears from the literature to be a frequent cause of panophthalmitis.

55. An Unusual Accident to a Glass Eye.—Millikin reports the case of an explosion of a glass eye in a woman who was subjecting it to considerable heat in the process of ironing clothes and asks whether the expansion of air in the cavity of the eye can not be the cause of the explosion. The eye was what is called the "reform" eye, in which the air is partially exhausted. The manufacturer suggests that possibly the vacuum was too complete and that anything that would crack the eye would allow the air to rush in to fill up the vacuum, possibly causing the sharp report which occurred. No very serious consequences followed the explosion.

Texas Medical News.

March.

58 Surgical Anatomy of the Inguinal Region. F. L. Barnes.
59 Case of Bronchiectasis Following Pneumonia. Complicated with Yellow Fever. J. T. Moore.
60 *Some Observations in Intestinal Anastomosis, with a New Technic. J. F. Eanes.

60. Intestinal Anastomosis.—Eanes has experimented on dogs in producing intestinal anastomosis by means of a bobbin composed of the sterilized pasteboard portion of a shotgun cartridge split on one side so that it can be adapted to the lumen. He thinks the device worth mentioning, since many surgeons are not prepared with other appliances and this is generally available. In his experiments on eight dogs, using the duodenum, jejunum and ileum as the field of operation, he has not had a single failure. The cylinders were passed in four to eight days.

American Journal of Obstetrics, New York.

April.

61 *Operative Treatment of Retroversion of the Uterus; with Report of Cases. Franklin H. Martin.
62 *Prevention of Post-operative Intestinal Paresis and Adhesions. Daniel H. Craig.
63 *The Body Defenses and Syncytioma Malignum. Joseph McFarland.
64 *Plastic Surgery of the Female Generative Organs. Henry P. Newman.
65 *The Philosophy and Rationale of Uterine Displacements. Chauncey D. Palmer.
66 Fibromyomata Complicating Pregnancy. Robert A. Murray.
67 *The Uterine Ligaments: Their Anatomy and Functions. J. Riddle Goffe.
68 Surgical Treatment of Gallstones; with a Report of Six Cases. J. Wilson Poucher.
69 Hysterectomy for Infectious Disease of the Uterus and Uterine Appendages. H. C. Beaver.

61. Retroversion of the Uterus.—Martin's paper is mainly a review of the various operations for the treatment of retroversion, reporting also some cases of the Alexander operation he performed. The main part of the article is a review of the literature.

62. Postoperative Paresis and Adhesions.—Craig assigned himself the problem of finding a means of regulating peristalsis after operations by counteracting the stimulated reflexes acting through the splanchnics and restoring energy to the exhausted nerve endings and muscles of the intestine. He first experimented with salines, but came to the conclusion that their use in this condition was irrational. He then followed the line suggested by Murphy in giving a full dose of the extract of cascara a few hours before the operation. This, however, has serious drawbacks and it does not seem practicable in emergency operations. While he was equally dissatisfied with calomel and salines postoperative and cascara preoperative, the article of the late F. A. Packard came to his aid on the use of eserin. On investigating eserin salicylate he finds that though the active principle has been considered extremely poisonous, it is not more so than many other commonly employed drugs and that it is highly spoken of by most clinicians in the treatment of atrophy of the intestinal muscular coats, especially by von Noorden, who is the only one that had regarded the use of eserin as a remedy for postoperative paresis. Craig has employed it subcutaneously because most easily employed in doses ranging from 1/60 to 1/40 of a grain, according to the susceptibility of the patient to respond to cathartics. More than 1/40 has not been found necessary. Active peristalsis can do far more to inhibit the formation of adhesions than can possibly be accomplished by any dusting powder or foreign membrane and does not overtax the peritoneum. The effects of peristalsis, he says, can be materially enhanced by leaving within the peritoneal cavity a moderate quantity, say a liter, of sterile salt solution, which enables the intestines to float away from the abraded surfaces. It is a fortunate thing that the natural antidote to the drug is one that co-operates with it as regards peristalsis—atropin. Moreover, nothing better prepares the patient for anesthesia than a small dose—1/50 to 1/100 of a grain—of atropin sulphate either by the mouth an hour previous to anesthesia or subcutaneously immediately before. Some have objected on account of its aggravating the patient's thirst, but the use of eserin has just enough counteracting effect to render the throat moist. He says anyone adopting this method of treating celiotomy patients will be impressed with the great comfort and general well-being of the patient as compared with the hours of distress and more or less abdominal distension, while we have been waiting until the patient can take a cathartic by the mouth. The only discomfort thus far observed was a rather severe epigastric pain in two patients, which yielded to codein sulphate by the mouth in ½-gr. dose, the codein interfering with the peristalsis far less than morphin. He thinks, however, that the eserin had nothing to do with the pain and that it could probably be attributed to the prolonged maintenance of the Trendelenburg position in difficult operations. He also assists the peristalsis, unless spedal

contraindications exist, by having the nurse turn the patient every half-hour until the peristaltic rumbling is heard. The patient is encouraged to assist in turning herself frequently as soon as she has recovered consciousness. Three cases are reported.

63.—This article appeared elsewhere. See THE JOURNAL of April 23, ¶1, p. 1100.

64. **Plastic Surgery of the Generative Organs.**—Newman offers some suggestions as to why plastic surgery of the female genitalia should be undertaken, and the qualifications of the operator. He insists particularly on the importance of recognizing the fact that operations are not simply cosmetic, but are for the restoration of functions, hence the superficial skin unions seen in some perineorrhaphies are hardly to be considered useful. Gynecic judgment is required in all cases. The woman's pelvic organs are largely the foundation of her health, and if their functions are interfered with her general health suffers. This brings about another suggestion to which he attaches the greatest importance, namely, the necessity of operating at a single sitting instead of dragging the surgery out in numerous operations. He makes it a practice to do at one and the same time all the different procedures which are pathologically justified, putting all the parts into as nearly as possible the normal anatomic relations and giving nature the best opportunity to do what is required of her. The gynecologist can then assure the patient that she is as nearly normal as mechanical surgery can make her, and she should be fully instructed as to the rational course of life for her to obtain vigorous health. It may take time to overcome the disordered functions and habits, but it is best done by this method of operation.

65. **Uterine Displacements.**—In the treatment of uterine displacements the first and most important element is to have some estimate of the causative factors under which the case can be classified, together with a thorough appreciation of all the local uterine and peri-uterine lesions and conditions. A complete and accurate diagnosis and a rational treatment based on this are not always easy. The first consideration, Palmer says, is improvement of the general health by diet, exercise, rest, baths, medication, posture, etc. Constipation must be relieved. Local uterine and peri-uterine alterations must be bettered. The bulk and weight of the displaced organ must be reduced by depletion, as the puncture and curette; the suppuration aided by general tonics and local astringents. The intra-abdominal pressure from above should be reduced by the proper adjustment of the clothing, better posture and the conservation of the normal angle of 55 degrees of the pelvic brim to the horizontal plane and increasing the tonicity of the uterine walls by quinin, strychnin, etc. In all retroversions the broad and round ligaments are more or less lax and the uterus in a passive hyperemia. Irreducible retroversions from adhesions usually call for abdominal section, indicating a chronic pelvic peritonitis with diseased appendages. Before using the pessary or major surgical operations it is worth while to see what electricity can do. The pessary itself is a choice of evils, but has its place like a crutch or cane, though never intended for constant or indefinite use. Its proper adjustment requires a thorough knowledge of gynecic pathology, much experience and not a little tact in manipulation. After having done all that can be done as indicated then surgical interference may be called for. In the first place all lacerations should be repaired and a skillfully performed sharp curettement of the whole endometrial cavity, a tracheoplastic operation, etc., the removal of primary causative factors in many cases and the withdrawal of aggravating associations. The Alexander operation, Palmer considers, has a very limited field and almost any displacement thus benefited can likewise be equally improved without operation, only with more time. Ventrofixation has a seemingly wider field, but the position of the uterus after this operation is not physiologic and is likely to interfere with future pregnancies. Hysterectomy is justifiable after marked prolapse in certain cases when pregnancy becomes impossible because of age or an artificial menopause. The pelvic circulation must be benefited in any case. No method of shortening the long round ligaments is equal, he says, to the intra-abdominal. The weakest feature is the comparatively feeble points of attachment of the anterior ends of the round ligaments. Most of the operations that have been advised for the rectification of posterior malpositions are more or less unsatisfactory or useless. He speaks particularly of the advantages of the utilization of the plastic uterine and vaginal operations and the well-performed Hegar operation on the perineum or posterior vaginal wall in which the denuded area should vary in length, width and shape, but always somewhat triangular, is a wonderful aid in many intrapelvic infirmities. The Stoltz operation on the anterior vaginal wall is much enhanced, he thinks, in its execution and results by denudation of a rather long, deep elliptical area, varying to suit the individual conditions and the stitching together of the raw surfaces with silkworm gut transversely. The anterior wall is then narrowed and strengthened and not shortened, as it would be by the ordinary Stoltz operation. A thoroughly done Stoltz operation, modified as suggested, and an equally broad and deep Hegar, may so strengthen and narrow the vagina that a descending uterus can not pass through it. The denudations should be abundantly wide and more or less deep, to and into the muscular coats of the vagina, so that when the sutures are passed transversely, firm and strong supporting partitions are secured and maintained. He advises with undue relaxation of the pelvic floor to utilise a continuous suture into the deep pelvic fascia with fine catgut before the superficial layers of silkworm gut are adjusted. This method secures complete and accurate coaptation of the opposing denuded areas and thorough construction of the solid perineum and vesico-vaginal septum.

67. **Uterine Ligaments.**—According to Goffe the uterus is supported and retained in position exclusively by its ligaments; each has a certain function, but the only one whose exclusive work is that of support is the uterosacral ligament. It furnishes the principal sustaining power. An additional function of the uterosacral ligament and the muscle fibers at the base of the broad ligament is mentioned. It is connected with the process of parturition and consists in rhythmically lifting the cervical tissue over the head of the child as uterine contractions and muscular pressure force the head of the cervix down toward the vulva, the process being similar to the slipping of a glove onto the finger.

Journal of Medicine and Science, Portland, Maine.

April.

70 Calculus in Wharton's Duct Complicated by Suppuration, with Involvement of the Submaxillary and Sublingual Glands. M. D. Lederman.
71 Spectacles. C. E. Norton.
72 Extraction of Lachrymal Style from Bronchi by Inverting the Patient. Albion H. Little.
73 Physical Economics, Comprising a Mathematical Formula for the Normal Earning Ability of the Body, etc. Brastus B. Holt.
74 *New Method of Treating Foreign Bodies in the Cornea, as Evidenced in the Treatment of 808 Recent Consecutive Cases. Edwin M. Fuller.

74. **Foreign Bodies in the Cornea.**—The point insisted on by Fuller is to denude the cornea well away from the part in which the foreign body has been lodged, leaving a free, smooth base, thus avoiding resulting corneal ulcer or scar. He prefers a fairly strong solution of cocain used once to a weaker solution used two or three times in the operation. An astringent solution like glycerotannin should be employed, as it will frequently prevent conjunctivitis. The use of hot baths, freely the first few hours, will often arrest such a complication. Colored glass should be prescribed at once. If a conjunctivitis or iritis arises total exclusion of light. Never bandage the eye and force the upper lid against the eyeball after the removal of foreign bodies. Oiling the edges of the lids of the offending eye at bedtime to prevent them sticking together is of importance. He condemns the removal of foreign bodies from the cornea by the laity with toothpicks, knives, etc.

University of Pennsylvania Medical Bulletin, Philadelphia.

March.

75 *Cervical Rib. David Riesman.
76 *A Small Series of Cases of Peculiar Staphylococcic Infection of the Skin in Typhoid Fever Patients. David L. Edsall.

77 Medical Paris During the Reign of Louis Philippe. J. Chalmers Da Costa.
78 Experimental Toxic Leucocytosis. J. G. Silverman.

75. **Cervical Rib.**—Riesman finds that cervical rib may exist without symptoms, which when present are local and functional. The local symptoms are a prominence above the clavicle or feeble pulsation high in the supraclavicular fossa. The functional symptoms are circulatory and nervous. The principal circulatory ones are a form of feebleness, absence of pulse, coldness of the extremities, occasional cyanosis and edema. The chief nervous symptoms are pain in the distribution of the brachial plexus, with parasthesias such as numbness, formication and awkwardness in the use of the hand, and in some cases weakness and atrophy. In cases of brachial neuralgia the possibility of the presence of the cervical rib should be considered. The treatment, except in the mildest cases, is excision of the rib.

76. **Typhoid Fever Eruptions.**—Edsall describes a peculiar vesicular eruption occurring over the sacrum, the buttocks and loins of typhoid fever patients and extending over the back and thighs. The cultures gave the pure growths of the *Staphylococcus aureus*. The cause of the infection he attributed to carelessness in the use of the bedpan and insists on more care as toward utensils than is commonly given them. The infection seemed to be carried in these cases by the bedpan.

Medical Bulletin, Philadelphia.
April.

79 Hemorrhoids—Cirrhosis of the Liver. John V. Shoemaker.
80 *Intestinal Peristalsis in Its Nervous Relations. Isaac Ott.
81 Report of a Case of Ovarian Cystoma. John A. McGlinn.
82 Electrolytic Treatment of the Prostate. John V. Shoemaker.
83 Treatment of Syphilis, with Report of Two Obstinate Cases. C. G. Clark.

80. **Intestinal Peristalsis.**—Ott reports experiments on rabbits, cutting the right vagus and sewing up the wound. On the fifth day the wound was reopened and the peripheral end of the vagus irritated, when it was found that the cardio-inhibitory fibers had degenerated and vagus irritation had no effect on the heart. During the irritation of the vagus he studied the movements of the intestines and under these conditions it was found that peripheral irritation of the vagus produced a slowing and in some cases an arrest of movement for half a minute. He thinks the results prove that the vagus contains intestino-inhibitory fibers.

Proceedings of the Pathological Society of Philadelphia.
March.

84 *Changes in the Intercostal Muscles and Diaphragm in Infective Processes Involving the Lung and Pleura. W. M. L. Coplin.
85 Some Recent Contributions to the Etiology of Cancer. Leo Loeb.
86 Case of Pancreatic Lithiasis with Atrophy and Lipomatosis of the Pancreas, Associated with Pulmonary Tuberculosis. George P. Muller.
87 Case of Filaria Immitis in the Heart of a Dog. Frederic H. Howard.

84. **Muscle Infection in Pulmonary Disease.**—Coplin has studied the condition of the intercostal muscles in disorders affecting the lungs and pleura and finds marked changes, dissociation of fibers, leucocytosis, infiltration, granularity, etc., and the presence of bacteria. The cause seems to be clear. In inflammations of the lung and pleura the lymphatic systems are engorged and the toxic materials are brought in close proximity to the intercostal muscle and diaphragm. It seems probable that the lymphatic channels may be occluded and the collateral currents must form through the intercostal muscles, exposing them to the dangers induced by contact with the toxic lymph. The influences of changes on the thoracic wall are suggested and alterations in the intercostal muscles may explain many side symptoms of pulmonary disease, etc.

Bulletin of the Johns Hopkins Hospital, Baltimore.
March.

88 *The Relation of Leucocytes with Eosinophile Granulation to Bacterial Infection. Preliminary Publication. Eugene L. Opie.
89 Relation Between Carcinoma Cervicis Uteri and the Ureters, and Its Significance in the More Radical Operations for that Disease. John A. Sampson.
90 George Cheyne, an Old London and Bath Physician (1671-1743). Thomas McCrae.
91 Case of Amaurotic Family Idiocy. Ernest Sachs.

88. **Eosinophile Leucocytes and Bacterial Infection.**—In this preliminary communication Opie describes his results with experiments on the peritoneal inoculation of guinea-pigs, proving to his satisfaction that eosinophile leucocytes play a part in the inflammatory reaction following the entrance of bacteria in the body. They are attracted from the blood to the site of the inoculation and from the bone marrow into the blood. Their destruction follows and regeneration later succeeds it.

Vermont Medical Monthly, Burlington.
March 25.

92 Rheumatism: Its Etiology and Treatment. C. B. Hussey.
93 Early Operations in Abdominal Troubles. Edmund M. Pond.
94 Malarial Fever in Children: Its Diagnosis and Treatment. J. Smithline.
95 Chronic Nasal Catarrh—A Simple and Effective Treatment. G. A. Gilbert.

Old Dominion Journal, Richmond, Va.
April.

96 Duties of Physicians to Each Other—Some Reasons Why They Should Not Antagonize Each Other. O. C. Wright.
97 Some Observations on the Possibilities of X-ray Therapy. Hunton G. Williams.
98 Fractures of the Long Bones—Diagnosis and Treatment. Hugh T. Nelson.
99 Etiology, Symptoms and Diagnosis of Lobar Pneumonia. E. H. Terrell.
100 Treatment of Lobar Pneumonia. Mark W. Peyser.
101 Report of an Obstetrical Case. John E. White.
102 Monstrosities. E. F. Babb.

Medical Herald, St. Joseph.
April.

103 Clinic. F. H. Coulter.
104 Some Unusual Accidents to the Eye. H. Gifford.
105 Anatomical and Clinical Study of 200 Postmortem Specimens of Prostatic Hypertophy—Preliminary Report. Wiley Brooms.
106 Relaxed Vaginal Outlet. Charles J. Simmons.

Mobile Medical and Surgical Journal.
April.

107 *Shock. W. R. Jackson.
108 Medical Ethics. E. L. Marechal.
109 Icterus Neonatorum. E. M. Goison.
110 Malvo-Autumnal Fever. P. W. Galloway.

Western Medical Review, Lincoln.
April 25.

111 Typhoid Fever. D. S. Hogan.
112 Pyrexia: A Physiologic Process. W. B. Ely.
113 Colotomy: Technic of Operation and Results. R. D. Mason.
114 Health as a Duty. E. Benj. Andrews.
115 Case of Neuritis of the Brachial Plexus, with Autopsy. W. H. Taylor.

Nashville Journal of Medicine and Surgery.
March.

116 Placenta Previa. J. B. Bell.

Merck's Archives, New York.
April.

117 Active Principle Therapy. Robert M. Sterrett.
118 An Index of Diseases, Alphabetically Arranged, with Their Modern Treatment. (Continued.) G. Bjorkman.

Virginia Medical Semi-Monthly, Richmond.
April 25.

119 The Rectum as a Controllable and Clean Bladder in Atrophy and Malignant Disease. J. W. Henson.
120 Acute Appendicitis—Varieties and Diagnosis. S. P. Latane.
121 The Secondary Lesions of Syphilis. Robert C. Bryan.
122 Some Points in the Treatment of Syphilis. F. H. Beadles.
123 Should We Change Our Mode of Capital Punishment for More Humane Methods? Edwin Lee Morgan.
124 Treatment of Lobar Pneumonia. Mark W. Peyser.
125 Etiology, Symptoms and Diagnosis of Lobar Pneumonia. E. H. Terrell.

New Yorker medicinische Monatschrift.
March.

126 Fibromyoma uteri im Klimakterium und nach der Menopause. Franz Foerster.

Medical and Surgical Monitor, Indianapolis.
March 25.

127 Paraffin Injections for the Correction of Nasal and Other Deformities. William F. Clevenger.
128 Insomnia and Its Treatment. Arthur J. McCracken.
129 Syphilis of the Nervous System. Charles W. Burr.
130 Actea and Rosacea. Karl L. Brown.
131 Etiology of Diabetes Mellitus. William Shimer.

Pacific Medical Journal, San Francisco.
April.

132 Biologic Test for Human Blood. Francis Williams.
133 A Therapeutic Chat. Emil Weschcke.
134 Pleasure of Being Caught Out. J. W. Kelley.
135 Physical Culture. H. H. Hill.

Fort Wayne Medical Journal-Magazine.
April.

136 History of the Association of the Wabash Railway Surgeons. C. H. Stemen.

Proceedings of the Philadelphia County Medical Society.

March 31.

136 Massage of the Heart for Chloroform Collapse. W. W. Keen.
137 Cutaneous Manifestations of Syphilis. Jay F. Schamberg.
138 Visceral Syphilis. John M. Swan.
139 Syphilis of the Nervous System. Charles W. Burr.
140 Treatment of Syphilis. H. M. Christian.
141 Case of Primary Typhoid Cholecystitis with Calculi. Francis T. Stewart.

Medical Examiner and Practitioner, New York.

April.

142 A Question of Ethics—Solicitors vs. Examiners. J. B. Allen.
143 The Value of the Physicians' Examinations from the Point of View of the Insured. John G. Monihan.
144 What of the Applicant's Teeth? Hilleon Hillyer.
145 The Blood as a Detail in Life Insurance Examinations—a Study in Technic and Interpretation. Woodridge H. Birchmore.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

April 23.

1 Recent Electrotherapeutic Work, with Special Reference to Lupus, Rodent Ulcer, and Malignant Disease. John Macintyre.
2 *Treatment by Roentgen and Radium Rays. Reginald Morton.
3 Some Typical Examples of Roentgen Ray and High-frequency Treatment, with Observations Thereon. Arthur W. Wigmore.
4 Use of Radium in a Case of Rodent Ulcer. J. A. B. Hammond.
5 Rodent Cancer Treated with X-rays. G. G. Stopford Taylor.
6 *Microbe Pathogenic to Rats and Its Use in the Destruction of These Animals. J. Danysz.
7 Administration of Chloride of Ethyl and Somaform, Alone or in Conjunction with Nitrous Oxid or Ether. C. W. Rampolph Daniell.
8 *Intrasplnal Cocainisation. Alfred S. Gubb.

2. **Roentgen and Radium Rays.**—Morton concludes that we have in the *x*-rays an agent of considerable power, capable of doing much good. The results in rodent ulcer alone are a great triumph. It is capable, however, of doing much harm in the hands of unskilled and unqualified persons. He opposes the popular notion that the instruments are all in all, and deprecates the way the work is being commercialised in London in the various institutions that have started up. One of the worst features of the case is that many regular members of the profession habitually employ unqualified men to do their electrical work. Proper medical training is as necessary here as elsewhere. As regards the practical application of radium rays, they are the same as the *x*-rays. While on account of the high price and the scarcity of the substance we lose in quantity there are some advantages in its convenient and direct application. The chief results so far have been in the treatment of rodent ulcer and lupus vulgaris and the number of reported cases are increasing. He things the most convenient apparatus is the small glass tube, one or two inches long, containing five milligrams, which can be applied for half an hour or so, as at the London Hospital. There the applications are made every second or third day, and there have been no severe reactions as yet. When an adequate standardized supply of radium is obtained, the applications will be very much simplified. Their value in cases of malignant disease is still under investigation, but some favorable results have been reported, at least as regards the relief of symptoms.

6. **The Danysz Bacillus.**—Danysz here describes the cocco-bacillus which he has isolated in spontaneous disease of field mice, and gives the results of experiments. He shows from Kirter and Kottyen's experiments in the Dunbar laboratory that the culture diminishes in virulence by passing through animals. It is, therefore, difficult to maintain the virulence or to increase it when it is found to be small. It can be increased only by making a large number of experiments and thoroughly testing the virulence of the cultures. When making experiments on a number of rats at a time, say thirty or more, it has been found that one or two cultures may be obtained more virulent than those from the others, and this virulence may be maintained for two or three months. By working in this fashion he has succeeded in keeping up the supply of virulent cultures for eight years. He gives an account of work in Odessa and its suburbs where the bacillus cultures were used with great advantage in the destruction of rats, and absolutely no ill effect to human beings or domestic animals was reported from their use.

8. **Intraspinal Cocainisation.**—Gubb reports results with this method of anesthesia; he has been very favorably impressed with it.

The Lancet, London.

April 23.

9 *Fractures of the Skull. Louis Bathe Rawling.
10 *Neurology of Vision. J. Herbert Parsons.
11 Epidemiology of Enteric Fever and Cholera in Hamburg. Dr. Reincke.
12 Three Cases of Reno-renal Reflex Pain: Cases in Which the Symptom Pointed to the Sound Kidney Being the Diseased One. David Newman.
13 Some Forms of Pseudo-appendicitis (Enterotyphlocolitis—Intestinal Lithiasis). Dr. Bettencourt.
14 New Form of Removable Bone Suture for the Prevention of Stitch Abscess. Lawrie H. McGavin.
15 *The Mental State in Myxœdema. H. Wolseley-Lewis.
16 Case of Excessive Colitis in Which a Left Inguinal Colotomy Was Performed to Control Extensive Hemorrhage. Henry Botham Robinson.
17 Case of Aneurism of the Aorta Rupturing into the Pulmonary Artery Associated with Fibrosis of One Lung. Frederick J. Smith.
18 *Treatment of Hypertrophic Pharyngitis and Laryngitis by the Evanescent Fume Thereum Nitrate. J. Gordon Sharp.

9. **Skull Fractures.**—Rawling's third lecture treats of injuries to the nerves in skull fractures. The olfactory nerves are affected when the cribriform plate is involved. The optic nerves are sometimes involved, though gross lesions of this nerve are not so common. The seventh and eighth are more commonly involved than any other basic nerves in basic fractures owing to their complicated intrapetrous course. In a transpetrous fracture the nerve is cut off completely near the genu and irreparable damage is often done. The ninth, tenth and eleventh nerves in the jugular foramen generally escape injury. He thinks that any implication of the condyloid foramen and the twelfth nerve is improbable and must be rare. The temperature in head injuries is classed under three types: First group, an earlier subnormal temperature, then a steady and progressive rise. The prognosis is unfavorable. In group two, the temperature is at first subnormal, but rises gradually to 101 or 102 and then remains for awhile. This indicates the crisis of the case and the subsequent fall, a favorable outcome, while a rise would indicate the contrary. In the third group, the temperature, at first subnormal, remains at that level or rises to about normal without any further subsequent elevation. In the former case the patient never recovers from the collapse; in the latter the injury is so slight that the stage of shock being neither prolonged nor deep is not subsequently followed by a reaction. These three groups of temperature changes are so constant that he considers the temperature chart an almost infallible guide to the prognosis of the case. Brain lacerations and concussions are noticed at some length. In most cases the typical compression symptoms are absent. The special symptoms of compression are probably referable to increased pressure on the vital centers in the medulla. In the early stages of shock and collapse the ordinary treatment must be adopted; the head kept low and the heart's action stimulated. The temperature should be taken every quarter of an hour, and as soon as a reaction appears, the head should be elevated and the body depressed, ice applied to the head and warmth to the trunk, with free venesection, the amount of blood to be withdrawn being in proportion to the severity of the injury and the violence of the reaction. Free bleeding is especially useful in lessening the subsequent intracranial exudation and pressure. The lower bowel should be emptied early by copious enemata, purgatives given, and the bladder periodically attended to. All punctured fractures and all markedly depressed fractures call for operative interference, but in many cases the question of injury to the internal table is dubious. The tendency is to establish an expectant treatment. Still he thinks a large number of these cases develop subsequent symptoms and that more general trephining and exploration is advisable in most doubtful cases. In comminuted vault fractures a thorough exploration generally necessitates the removal of the fragments and their reposition is open to objections, as they are a source of irritation and increase the tendency to

the formation of adhesions between the dura mater and the bone; the actual utility of their reposition is open to doubt. It is advisable, therefore, to remove all small fragments and to protect the brain by metal plates cut to a suitable size, shaped, pegged and nailed in position. When there is brain laceration and the chances of suppuration are great the plate should only incompletely close up the bony gap. In basic fractures without an obvious compressing agent present, such as a foreign body, middle meningeal hemorrhage, etc., he suggests that the cerebellar fossa should be trephined as low down as the muscular attachments will allow, accordingly, as the force was applied to the right or the left side of the head, the opposite cerebellar fossa should be explored. The opening should be of good size, the dura mater opened and the bone not replaced. A drainage-tube should lead through the flap to the gap in the skull. The cases where this is advisable are almost always fatal, but this method, he thinks, may add to the chance of recovery by lessening pressure in the region of the fourth ventricle. He pleads for long attention to all head cases. Six months at least should elapse before the patient should return to his ordinary occupation.

10. **The Neurology of Vision.**—Parsons' second lecture treats more especially of the innervation of the pupil.

15. **Myxedema.**—The mental state in myxedema, according to Wolseley-Lewis, is simply the retardation of psychomotor action. The perception is usually good, the memory is retentive, though less impressible, and the judgment and reasoning power are not defective. Ideation and the formation of concepts do not seem to be diminished and the association of ideas seem to be good, but there is a retardation of thought and the elaboration of an idea is difficult. It is in the volition and action that the mental symptoms of the condition manifest themselves. Changes in the mental condition of cases of myxedema are almost confined to the sphere of action. Wolseley-Lewis seems to think it necessary to suppose that either some toxin in the plasma surrounding the motor cells inhibits the chemical processes that originate the motor impulse or that the absence of some substance from the blood interferes with the discharge. This toxin is neutralized or this essential substance is supplied by thyroid extract, and he has observed that the simultaneous exhibition of syrup of iodid of iron adds to its action.

18. **Thorium Nitrate.**—Sharp has experimented in hypertrophic pharyngitis and laryngitis by using an inhaler with a solution of neutral thorium nitrate, apparently with very good results. Whether these are due to emanations from the thorium he does not positively say, but he feels encouraged to give the treatment further trial.

Intercolonial Medical Journal of Australasia, Melbourne.

March 20.

19 The Static Machine in Electrotherapeutics. J. A. Reid.
20 *The Declining Birth Rate in Australia. W. McLean.
21 Remarks on Three Successful Cases of Resection of Small Intestine. Fred D. Bird.
22 *Dermamestropathism. Herman Lawrence.
23 Note on the Rarity of Hydatid Disease in Egypt. Frank C. Madden.
24 Unusual Case of Hemorrhage from the Bowel. C. A. Altmann.
25 Dermatological Clinics. Herman Lawrence.

Journal of Tropical Medicine, London.

April 15.

26 Notes on the Tropical Diseases Common in the Anglo-Egyptian Sudan, and Some Remarks on Certain of the Native Remedies Generally Employed. Andrew Balfour.
27 Cold Weather Mosquito Notes from India.—Malaria in Umritsar and Its Causes. (Continued.) G. M. Giles.
28 Protozoal and Entozoal Infection of Natives of Benguella, Angola, West Africa. Frederick Creighton Wellman.
29 Report of Two Cases Illustrative of Surgical Work in the Tropics. Frederick Creighton Wellman.

20. **The Declining Birth Rate.**—McLean, the government statist of Victoria, has taken up the question of the decreasing birth rate in that state, and concludes that it is not so actual a factor as regards increase and decrease of population as has been held. The country has a reduced birth rate owing, in part, to the fact that a specially selected population at first occupied it, and this has with time been replaced by a less fecund but more normal population. It has also suffered from emigration and urban concentration, both of which tend to diminish the birth rate. The average physique of the women is not equal to that of earlier years, and their fecundity is correspondingly diminished to some extent. The increase of the average age at marriage is too obvious a cause to call for special comment. The lowered death rate, however, keeps the increase of population above that even in some countries where there is a much higher birth rate. At the assumed rate of natural increase the population of Australia would double itself every forty-seven years, independent of immigration. He asks what are the advantages of a high birth rate when accompanied, as seems always to be the case in a normal population, with a high infantile death rate.

22. **Dermamestropathism.**—In 1902 Lawrence read a paper called "Skin Markings" at the Medical Society of Victoria (see abstract in THE JOURNAL, XXXIX, Aug. 23, 1902, p. 456) on a new clinical method of diagnosis and exhibited cases. He has since studied the subject and holds to his former opinion that by this method of clinical observation the irritability of tissues in general may, in some diseases, be calculated by the irritability of the tissues of the skin; that certain markings aid the prognosis in certain diseases and may forecast a relapse of the disease and may explain the exaggeration of the symptoms in some individuals; that suitable treatment may perhaps be worked out by observing the effect of treatment on the markings of the skin. He illustrates his ideas with reports of cases of irritating dermatitis, urticaria pigmentosa and scleroderma.

Bulletin de l'Académie de Médecine, Paris.

Last indexed page 1083.

30 (LXVIII, No. 12.) *A propos du diagnostique clinique de l'actinomycose humaine. A. Poncet and L. Berard (Lyons).
31 Cas de piroplasmose humaine. Catholre (Tunis). Abstract.
32 (No. 13.) *Sur l'emploi de chloroforme, associé à l'oxygène, au moyen de l'appareil de Roth. Kirmisson.
33 *De la gravité de la syphilis à complications oculaires. Motais (Angers).
34 (No. 14.) *La tuberculose dans l'armée. Kelsch.

30. **Differential Diagnosis of Human Actinomycosis.**—Poncet reiterates that the centers of human actinomycosis are merely the medical centers where it is better differentiated. He states that 176 cases had been published in France by June, 1903, and 48 have been observed in Paris alone. He thinks that the clinical diagnosis is more apt to be correct than the microscopic, especially when—as often happens—the parasites have withdrawn to inaccessible recesses before encroaching secondary lesions, or been destroyed by the agents of the associated infections. He emphasizes that this affection should occur to the mind as regularly as syphilis and tuberculosis when examining a patient. Every local suppuration of a tenacious, recurring character should be regarded with suspicion, especially chronic fistulous phlegmons suggesting a neoplasm by their hardness, limitation and location on sites particularly affected by these parasites, the face, neck, abdominal wall, iliac fossa, chest, ano-rectal region and, in a much smaller proportion, the limbs. The most striking feature is the association of the characteristics of a cancer with those of an inflammatory lesion. Of course suppuration does not exclude cancer, but the idea of actinomycosis should not be rejected merely from the negative findings of a few microscopic examinations and without having given iodid treatment a chance. He has observed 3 cases in which an old focus of actinomycosis became transformed into a cancer. The ray fungus had been found numerous during the early phase, but after the cancer had been established no more were to be discovered. This form of actinomycotic sarcoma is most frequent on the jaw. In actinomycosis the subjects are generally young, the lesions are not inavitably progressive, the edema, induration and infiltration of the parasite extend far into the surrounding muscle and connective tissue. The infiltration is liable to assume a sclerous consistency, with trismus. The edges of the ulcerations are looser than in cancer, and parts of the edges heal over. The glands are seldom involved, unless from secondary pyogenic infection. The latter is the cause of the impairment of the general health rather than the actinomycosis itself.

32. **Roth Apparatus for Administration of Associated Oxygen and Chloroform.**—Kirmisson relates his experience with this

apparatus, which he regards as a great advance. [Its latest application was in the air-chamber experiments in Germany, mentioned on page 1174.—ED.]

33. **Gravity of Syphilis with Ocular Manifestations.**—Motais has been impressed with the unusual gravity of the tertiary manifestations in cases of syphilis in which eye lesions were observed during the early stages. This exceptional gravity was noted in 52 per cent. out of 82 cases. In the 32 of iritis the tertiary manifestations involved the nerve centers in 15 per cent. and the bones in 20 per cent. In 36 of chorio-retinitis bone lesions occurred in only 2.3 per cent. and brain or spinal in 22 per cent. In the 14 instances of neuritis and atrophy of the optic nerve 5 of the patients have not developed serious manifestations during the three to twelve years since, but bone lesions have been observed in 7 per cent., and brain or spinal lesions in 50 per cent. of the 9 other cases. Fournier thinks that iritis indicates an exceptionally severe fresh syphilis, but doubts whether it presages an unusually grave course later. Motais urges the necessity for prompt and energetic specific treatment of the syphilis in case of eye lesions, with oversight for long after. He found local subconjunctival injections of sublimate a powerful adjuvant in treatment. Hallopeau reported a case of multiple gummatous ulcerations treated by mistake with local applications alone of sublimate, with almost complete healing in three weeks.

34. **Tuberculosis in the Army.**—Kelsch remarks that contagion of tuberculosis between man and man admits of degrees and requires certain conditions for its realization. Far in the lead among these conditions is the consent of the organism to the misdeeds of the bacilli. No other infectious disease can be compared to tuberculosis in respect to the importance of the connivance of the organism. The prophylactic measures in vogue are wise and necessary, but the most solid foundation for prophylaxis of tuberculosis is the development of the physical vigor and the amelioration of social and hygienic conditions. He ascribes the frequent development of tuberculosis among new recruits to the flaring up of some smoldering or almost extinct focus, fanned into a flame by the vicissitudes of army life. New recruits should be taken in during the summer and fall rather than in winter or spring.

Revue de Chirurgie, Paris.

Last indexed page 482.

35 (XXIV, No. 2.) Un nouveau cas de kyste juxta-intestinal. F. Tuffier and P. Lecène.

36 Des angiomes du sein (of breast). P. Malapert and R. M. Beauchant.

37 Recherches expérimentales sur les fractures limitées du fond de la cavité cotyloïde. L. Thevenot.

38 *Ulcère perforé de l'estomac. Intervention.* Guérison. Considérations sur le drainage dans les péritonites. P. Guibal.

39 (No. 2.) *Sur les manifestations des tumeurs de la région rolandique ou motrice. H. Duret.

40 *Une nouvelle théorie pathogénique de la luxation congénitale de la hanche (hip joint). P. Le Damany. (Commenced in No. 2.)

41 *Tumeurs bénignes du corps thyroïde donnant des métastases. M. Patel.

42 *De l'envahissement de la trachée et de l'œsophage par le goître cancéreux. C. Viannay and L. Pinatelle.

43 Etiologie et mécanisme des lésions de l'intestin dans les contusions abdominales. C. Dambrin.

44 *Le traitement du cancer gastrique par la gastro-entéro-anastomose au bouton de Jaboulay-Lumière (d'après 100 observations). G. Gayet. (Concluded. First part in No. 1.)

45 (No. 4.) Outward Luxation of Knee. Vautrin (Nancy).—De la luxation du genou en dehors compliquée de déchirure du nerf sciatique poplité externe.

46 Note sur des exostoses symétriques des scaphoïdes tarsiens. C. Féré and M. Denker.

47 *La topographie cranio-cerébrale simplifiée et le cranomètre de Krönlein. A. Bert and P. Vigeard.

48 Le myxome pur des os. P. Boubeyran. (Concluded. First part in No. 2.)

49 Hallomégalie. Hypertrophie congénitale des orteils (of toes). H. Cauhot and R. Mercade. (Commenced in No. 3.)

50 Ostéomyélite aiguë de l'extrémité supérieure du fémur. J. Guyot. (Concluded. First part in No. 2.)

38. **Perforated Ulcer of Stomach and Its Drainage.**—Guibal relates that 4 cases of perforation of a stomach ulcer were observed in Tuffier's service in a single year. The first 3 were middle-aged women arriving at the hospital with signs of diffuse purulent peritonitis, the patients unable to answer questions, and incisions on the median line and in the iliac region revealed the pelvis full of pus but the abdominal organs apparently sound. Death followed in less than twelve hours and an undiagnosed perforated ulcer was found in the stomach. The fourth patient was seen early enough for the diagnosis to be made in time from the sudden onset of pain in the epigastrium, the pain and the muscular "defense" following a descending course and predominating in the right side of the abdomen, and the absence of vomiting, with the characteristic attitude and history of stomach trouble during the past two years. The respiration was frequent and of a reversed type, that is, the abdomen subsided during inspiration and protruded during expiration, from paralysis of the diaphragm. The patient promptly recovered after sero-serous coaptation of the wall of the stomach, drawn together with a Lembert suture. This was preferred to suture of the perforation as the edges were so thin. Guibal ascribes much of the success to his method of draining the peritoneum afterward. Five incisions were made, one in the epigastrium, one in each iliac fossa and a median, suprapubic incision, supplemented by an incision in the posterior cul-de-sac. Each incision was made amply large and a large drain inserted, wrapped in dry aseptic gauze. The incision in the Douglas was the most important as gravity co-operated with capillary attraction to insure copious drainage. Much larger amounts of fluid escaped through this drain and for a longer period than from the other drains. In the case reported fluids still drained away till the fifth day, while the other drains were permanently dry by the third. He has applied these five large incisions for drainage in a number of other cases of diffuse peritonitis and especially the drain in the Douglas, and always with fine results.

39. **Symptoms from Tumors in Motor Region.**—Duret comments on the fact that much the larger number of curative operations on the brain have been in the motor region, 214 out of 344 in his statistics. He reviews here and tabulates 64 cases of tumor in the rolandic or parietal region with special reference to the sensory disturbances in the leg in 12; in the arm or arm and leg in 35, and in the face in 7, with also 10 cases in which the tumor was in the parietal lobule—the sensory disturbances compared for each case with the site and nature of the tumor. He further analyzes the clinical picture of large tumors involving several departments of the motor zone. The vast empire occupied in the brain by the sensory motor zone explains why the tumors developing in it exhibit such a variety of clinical manifestations. The different sensory and motor symptoms presented should be carefully studied not only in themselves but in the date of their appearance, the order of their evolution and their relation to the topography of the cortical centers. It should always be borne in mind that the sensory-motor disturbances may be due to some other origin. Tumors in this region usually develop in several distinct phases, the phases of spasms and convulsions, of paralyses and contractures and of atrophy of the muscles, with sensory disturbances liable throughout. It is a remarkable and encouraging fact that the general troubles may not develop for months or several years or be merely suggested by attacks of headache or convulsions. The diagnosis should be made early, without waiting for the symptomatic procession of the established syndrome. The characteristics of the convulsive attacks, if distinctly localized, should afford grounds for successful surgical intervention. The attack of spasm or convulsion is preceded by a sensory and motor aura, exceptionally, the aura may be mental or consist in sudden and transient aphasia, but generally it is purely motor, a spasm, a tonic or clonic contraction of a small number of muscles, of a finger or toe, or of the tongue or lids. This alarm signal always corresponds to the exact site of the neoplasm in the motor zone. The order in which the convulsive movements occur is typical of the topographic order of the centers in the brain. If there is any irregularity in this order of occurrence it is more probable that the tumor inducing them has only indirect connection with the motor zone, and that it is a question of irritation from a distance.

40. **New Theory of Cause of Congenital Dislocation of Hip Joint.**—Le Damany's extensive work presents arguments to sustain the view that congenital dislocation of the hip joint is

due to exaggeration of the strictly human element in the pelvis and femur. These parts have developed anthropologically beyond the present human standard, and such individuals are degenerates not downward but upward.

41. **Metastases from Benign Tumors in Thyroid.**—Colloid tumors in the thyroid gland are liable to induce the formation of metastases which may invade the skeleton or viscera, the skull, jaw, spine, pelvis or limbs having been involved in different cases, although the humerus and femur are the usual sites. The lung is the viscus generally invaded. The metastatic tumor is liable to cause trouble sooner or later even when the thyroid tumor remains constantly latent. Extirpation of these metastatic tumors has generally been a serious operation owing to the lack of delimitation, and recurrence has been noted in some instances. In case the long bones were affected the limb has been sacrificed by some surgeons, but Patel does not think this is advisable, as we can not be sure that the tumor is single, unless one's hand is forced by local trouble. Jaboulay has had a patient cured during the year since he operated for the removal of a metastatic tumor of this kind. The patient was a woman of 65 with a benign goiter and a metastatic tumor at the inner angle of the orbit in the left frontal bone. The goiter had been stationary for thirty years. It was uniformly hard and there were no pains, either spontaneous or on pressure. The ablated tumor revealed parts in which the characteristics of normal thyroid tissue were exactly reproduced, while other parts showed an extremely malignant epithelioma. The particulars of 17 other cases are given as found in the literature of Germany and France. The communication issues from Jaboulay's clinic.

42. **Cancer in Thyroid.**—The special phase of the subject studied in this communication is the invasion of the trachea and œsophagus by the cancer. Only 7 instances are known in which the œsophagus was actually invaded by the cancer out of 173 cases of cancerous goiter. One is described in detail as personally observed. The cancer developed in this case without preceding goiter, its abrupt onset simulating acute thyroiditis. The particulars of 14 other cases are also cited from the literature.

44. **The Jaboulay-Lumiere Button in Gastroenteroanastomosis.**—Gayet has selected 100 cases out of a larger experience in which this button was used, and extols its advantages. No suture of any kind is required, as it automatically performs

its office. The rapidity with which it can be introduced and the anastomosis completed render it particularly valuable in palliative cancer cases "in which even moments count." This button has been in use since 1900, and the mortality in the 100 cases of cancer has been 18 per cent.; during 1902 it was 7.6 per cent., and for six months in 1903 it was only 6.66 per cent. The average survival was seven months, but this includes a number who have shown no signs of recurrence to date. The 100 cases are tabulated. The button does not require any thread thrown around it, as it locks firmly. The slit in the side enables the button to be worked into the viscus through a very narrow opening, on the principle of the cuff buttons inserted by screwing them in.

47. **Topography of Skull and Brain.**—Krönlein's craniometer was described in THE JOURNAL, xxxii, page 312. It has been given a thorough trial at Lyons and the results set forth in this communication are decidedly in favor of it as a simple, easy and inexpensive method of locating the various parts of the fissure of Rolando and of Sylvius. In 25 trials on the cadaver these fissures were exactly located in 14, and in 8 there was variation from the exact location, but never to a distance greater than the diameter of the trephine. Other craniometric methods proved to be much less exact.

Archiv f. Gynäkologie, Berlin.

Last indexed page 718.

51 (LXXI, No. 1.) Zur Kenntnis des Sarcoma labii majoris. Agnes Bluhm (Berlin).

52 *Klinische Studie über Eklampsie. Meyer-Wirz (Zurich).

53 Study of Causes of Entrance on Labor. L. Blumreich.—Experimente zur Frage nach den Ursachen des Geburtseintrittes.

54 Hematologic Study of Causes of Prolapse. O. Schaffer (Heidelberg).—Ergebnisse hämatologischer Untersuchungen für die Aetiologie und Pathologie der Senkung der weiblichen Genitalien.

55 Ueber experimentelle Erzeugung von Hydramnion. B. Wolf (Berlin).

56 *Causal Relations of Myoma and Heart Affection. G. Fleck (Göttingen).—Myom und Herserkrankung in ihren genetischen Beziehungen.

57 (No. 2.) Causes of Bleeding in Case of Myoma. A. Theilhaber and Hollinger (Munich).—Ursachen der Blutungen bei Uterus-Myomen.

58 *Post-Operative Dehiscence of Cicatrix in Wall of Pregnant Uterus. R. v. Fellenberg (Berne).—Zur Narbendehiscenz in der Wand des graviden Uterus nach früheren gynäkologischen Operationen.

59 *Results of Artificial Premature Delivery; Fate of the Children. C. A. Lorey (Halle).—Die Erfolge der künstlichen Frühgeburt, mit bes. Berücksichtigung des späteren Schicksals der Kinder.

60 Eine besondere Form noduläer Adenome der Vulva. L. Pick (Berlin).

61 Delivery with Fractured Pelvis. B. Bonne (Vienna).—Ein Frakturbecken.

62 Zur Lehre des Chorio-Epithelioma malignum, nebst Bemerkungen über Diagnosen-Stellung desselben. M. Roeb (Strassburg).

63 Occlusion of Tube. G. Fleck.—Entstehung des Tuben-Verschlusses bei der gynatretischen Hematosalpinx.

64 The Blood in Pregnancy. A. Payer (Graz).—Das Blut der Schwangeren.

52. **Clinical Study of Eclampsia.**—In this communication from the clinic for women's diseases at Zurich the details of 117 cases are tabulated and the postmortem findings in 35 are analyzed. Among the practical conclusions deduced we note the great value of instrumental dilatation in certain cases, also the remarkable predisposition of eclamptic subjects to infectious septic processes. Chloroform was used transiently during the convulsions, sometimes supplemented by chloral per rectum and minute doses of morphin. Inhalation of oxygen proved a valuable adjuvant, especially during the attacks. It seemed to have a favorable influence on the entire syndrome. One patient died in less than two hours after a hot bath. Venesection seemed to have a favorable influence in the 15 cases in which it was used. Bronchopneumonia was found in 6 of the 35 fatal cases, with abscess formation in one case. In some of these cases the lung process was evidently due to food getting into the air passages. The rule should be strictly enforced to give no food to an eclamptic patient by the mouth until consciousness is completely restored. This rule was always observed in the clinic, but the damage had been done before the patients were received. Three of the 35 fatalities were due to sepsis. The eclampsia mortality was thus 27.3 per cent. and in the 90 cases observed during the last decade only the mortality was 23.3 per cent. The mortality of the children was 38 per cent.

56. **Causal Relations of Uterine Myomata and Heart Disease.**—Fleck's article is based on 325 cases of uterine myomata. A heart affection was associated with the condition in 133, that is, in 40.9 per cent. In 46 out of these 133 patients there had been no hemorrhages. At the necropsy of the 12 patients who died in the clinic indications were found which sustain his conviction that a myomatous affection of the uterus is very frequently associated with a degeneration of the heart muscle, which can only be the result of the action of toxic substances. It is sometimes accompanied by a tendency to fatty degeneration, which is probably referable to some anomaly in the metabolic processes. Still more constant is the finding of gross anatomic changes in the ovaries. It is more than probable that these four things are in close mutual relations, and that the tendency to myomatous growths is merely one feature of a general process involving several organs. In all the fatal cases death occurred suddenly, with symptoms of heart failure. In one instance there was embolism in the pulmonary arteries; in 2 others the heart lesions amply ex-

plained the fatality. The others succumbed soon after an operation. In 6 of the fatal cases there had been no bleeding.

58. **Rupture of Cicatrix in Uterus Wall.**—Fellenberg has observed 2 cases of dehiscence of the uterus wall. The rupture was in the cicatrix left from a preceding laparotomy with excision of a wedge from the uterine insertion of one tube. The wall should be sutured in tiers in any intervention on the uterus and the patient should be warned to enter a hospital for future deliveries. Everything should be in readiness for a laparotomy at any moment after labor commences. When such supervision is impossible the birth should be terminated artificially to forestall rupture.

59. **Fate of Children Artificially Delivered Before Term.**—Lorey writes from Halle that the experience there demonstrates that three times as many children are born viable in cases of deformed pelvis when premature delivery is induced in comparison with other cases in which the pregnancy is allowed to go to term. Out of 100 births 74 were born alive, and 60 left the clinic alive, the mortality being thus only 40 per cent., while in 207 previous childbirths of the same women the mortality had been 78.19 per cent. Of the 86 children followed to date, 78.5 per cent. of the 51 legitimate children survived the first year, and 71.5 per cent. of the total number. One of the 83 mothers died of sepsis and 66 per cent. had an afebrile childbed. He advocates induction of premature delivery, but not before the thirty-sixth week, in cases of pelves of 8 to 10 cm. The outlook for the children is good. When the conj. vera is less than 7 cm. artificial delivery should never be attempted. When the birth is long protracted injection of antistreptococcus serum is advisable. In case of sickness of the mother the pregnancy should be interrupted as soon as threatening symptoms are observed. The prognosis for the child is exceptionally bad. In 37 cases in which the mother was suffering from eclampsia, nephritis, heart disease, struma, cancer or cystitis, while 63 per cent. of the children left the clinic alive, only 30 per cent. survived the first year of life.

Archiv f. Path. Anatomie, Etc. (Virchow's), Berlin.

Last indexed page 982.

65 (CLXXV, No. 3.) Relations of Posterior Roots to Spinal Ganglia. K. Kiebt (Halle).—Experimentell-anatomische Untersuchungen über die Beziehungen der hinteren Rückenmarkwurzeln zu den Spinalganglien.

66 Noch einmal die Lage des Zentrums der Macula lutea im menschlichen Gehirn (location of center for macula lutea). L. Laqueur.

67 Blood in Cadaver. M. Simmonds.—Ueber bakteriologische Blutuntersuchungen an der Leiche.

68 Developmental Disturbances in Kidneys. O. Busse (Greifswald).—Ueber Cystenniere und andere Entwicklungsstörungen der Niere.

69 Ueber ein Epitheloma papillare. L. Schwarz.

70 Zur Histogenese sogen. Riesenzellen (giant cells). J. Schleifstein.

71 Ueber multiple Amyloid-Tumoren des Kehlkopfs und der Lunge (of larynx and lung). G. Herxheimer. Supplementary note.

Berliner klinische Wochenschrift.

72 (XLI, No. 15.) *Experiences in Hydrotherapeutics of Lung Affections. L. Brieger.—Erfahrungen bei der hydriatischen Behandlung von Lungenkrankheiten.

73 Ueber die Verwendung des Scopolaminum hydrobromicum in der ärztlichen Praxis. K. Lloplelt.

74 *Therapeutische Versuche mit Elektro-Magneten. T. Cohn.

75 *Latent Foci in Tuberculosis and the Tuberculin Test in Light of Late Research. G. Cornet (Berlin).—Die latenten Herde der Tub. und die Tuberculindiagnostik im Lichte neuer Forschung. (Commenced in No. 14.)

76 *Paralysis agitans nach Unfällen (after accidents). K. Ruhemann (Berlin). (Commenced in No. 14.)

72. **Hydrotherapy in Lung Affections.**—Brieger is in charge of the Institute of Hydrotherapy connected with the University of Berlin, and he claims that the judicious use of these measures is indispensable in the treatment of tuberculosis. He asserts that routine treatment should be avoided, and this is possible only when the physician himself undertakes or at least supervises the practical application of these physical modes of treatment. Hydrotherapy is a functional therapy, and he has found it accomplish wonders in arousing the resisting powers of the body in various lung affections as he describes in detail. In catarrhal pneumonia the half bath with vigorous friction and pouring cold water on the back of the neck—cautiously applied—form the sovereign remedy, especially valuable for promoting expectoration. The coil of cold tubing over the heart is very useful in croupous pneumonia. Hydriatic treatment will arrest bronchial asthma and prevent its recurrence. The attacks are aborted by reflex stimulation, especially of the skin—extreme temperatures in form of hand or foot baths and douches, or friction to the thorax with hot wet cloths and hot compresses afterward to chest and back. Recurrences are prevented by a systematic course, generally with half baths at about 90 F. and douches at 70 F., Scottish douches and rubbing of the entire body. In one case the attacks increased during menstruation, which impelled him to seek to influence the sympathetic plexus in the abdomen as possibly contributing to the asthma. After a long hot bath he let the water out of the tub and poured cold water from a height on the abdomen, instructing the patient to breathe deep. After a five months' course of treatment with this and other measures the patient, a woman of 41, who had suffered for three years from severe, typical asthma, was completely cured, as likewise a large number of other patients, both men and women. Hydrotherapy hardens the tuberculous patient and enables him to stand the vicissitudes of the home climate. It stimulates the appetite and the patients increase in weight, while they become more resistant to superposed infection and the general health benefits in every way.

74. **Electro-Magnet in Therapeutics.**—Cohn has tested the Konrad apparatus which, with a current of 30 to 40 amperes, induces a magnetism with polarity alternating a hundred times a second. [It has proved very useful in Lilienfeld's hands in an experience with 1,200 subjects.—Ed.] Cohn ascribes the results attained to suggestion only. His experience is limited to 37 cases.

75. **Tuberculin Test Viewed by Light of Recent Research.**—Cornet affirms that later researches have demonstrated that the reaction to tuberculin is a group reaction. It shows that there is some focus where a bacillus belonging to the tubercle group is ensconced, but it affords no information as to whether the bacillus in question is liable to prove dangerous to the existence of the bearer then or later. He expresses amazement that such serious investigators as von Behring, for instance, have allowed themselves to be misled by the Franz and Naegeli statistics and based new hypotheses on them. The positive tuberculin reaction must in future be regarded as in itself no criterion as to possibly progressing tuberculosis. Only in combination with other symptoms pointing to progressing tuberculosis is its testimony of value. Reaction to tuberculin is no proof that the subject requires treatment, and the disappearance of the reaction is no proof that sanatorium treatment has been the cause of the disappearance. The slight amount of benefit now known to be derived from sanatorium treatment in itself must be still further critically sifted. The insignificant anatomic lesions induced by almost entirely avirulent bacilli of the tubercle group—which are yet liable to cause a reaction to tuberculin—are not very important in pathology. The frequency of their occurrence is a question still to be solved.

76. **Paralysis Agitans After Accidents.**—Ruhemann's experience includes 28 cases in which there was no history of trauma out of a total of 35, including 19 women and 16 men. In 13 there had been some emotional shock, in 7 direct trauma. In the others intoxications, over-exertion and organic brain affections were noted in a few, but the rest could not ascribe any cause. A number of the women had suffered from migraine before. The age ranged in the men from 28 to 65, the average about 50, while in women the age ranged from 47 to 70, the average 58. Paralysis agitans is, therefore, liable to develop in elderly subjects without appreciable cause, but in quite a considerable proportion of cases a causal connection between some trauma and the palsy can be unmistakably established. The symptoms developed shortly after the trauma or were markedly aggravated by it. The palsy usually affected the member injured in the accident; otherwise it did not differ from that observed in the non-traumatic cases. When it develops in a comparatively young subject, previously healthy,

the trauma may be regarded as the sole cause. (Compare with Hart's article, page 921.)

Centralblatt f. Bakteriologie, Etc., Jena.

Last indexed page 1057.

77 (XXXV, No. 4.) Streptococcus Toxins. F. B. Simon (Zurich).—Untersuchungen über die Gifte der Streptokokken. (Concluded.)

78 Ein neuer tierpatogener Mikrobe Bacillus carnis. E. Klein (London).

79 Bacterium cyprinicida nov. spec., der Erreger der Rotseuche der karpfenartigen Fische. M. Plehn (Munich).

80 Das Agglutinoskop. Ein Apparat zur Erleichterung der makroskopischen Beobachtung der Agglutination im Reagens Glas. H. Jäger (Strassburg).

81 Study of Light Intensity in Phosphorescent Bacteria. A. Lode (Innsbruck).—Versuche die optische Licht-Intensität bei Leucht-Bakterien zu bestimmen.

82 To Clarify Agar Without Filtration. H. Fischer.—Ein einfaches Verfahren Nähragar ohne Filtration zu klären.

83 Robert Koch. F. Loeffler.

84 Ueber die intracellulären Toxine gewisser Mikroorganismen. A. Macfadyan and S. Rowland.

85 Zur Biologie des Smegma-Bacillus. A. Loewnen.

86 A Note on Occurrence of a Trypanosome of the Rabbit. G. F. Petrie (London).

87 Die Biroplasmosen der Rinder (of cattle). E. Dschunkowsky and J. Luhs (Surnabad, Transcaucasia).

88 Ueber Filaria Bancrofti Cobbold. N. Taniguchi (Japan).

89 Complement-Ablenkung durch hämolytische Amboseptoren. J. Morgenroth.

90 Alcohol Decoloration of Gram-stained Bacteria for Diagnosis of Species.—Die Alkoholentfärbung der nach Gram gefärbten Bakterien als Speciesdiagnose in Verbindung mit einer Untersuchung der für die Gram-Färbung in Betracht kommenden Faktoren.

91 Contribution à l'étude, à la classification et à la nomenclature des affections connues sous le nom d'actinomycose. J. Lignières and G. Spitz (Buenos Ayres).

92 Reply to Obermaier in No. 6, XXXIV. Engels.

Deutsche medicinische Wochenschrift, Berlin and Leipsic.

93 (XXX, No. 16.) *Ueber Operationen in der Brusthöhle mit Hilfe der Sauerbruchschen Kammer. J. v. Mikulicz. (Commenced in No. 15.)

94 *Zur Kenntnis der lichtwirkenden (fluorescierenden) Stoffe. H. v. Tappeiner.

95 *Ueber das Scapular-Knacken. H. Küttner (von Bruns' clinic, Tübingen). (Commenced in No. 15.)

96 Precipitin Differentiation of Human and Animal Blood. A. Wasserman, G. Hauser and Uhlenhuth. Polemic.

97 *Chromo-Zystoskopie. F. Voelcker and E. Joseph (Czerny's clinic, Heidelberg). (Commenced in No. 15.)

98 *Ueber die sogen. menschliche Botryomykose. J. Frédéric (Strasburg). (Commenced in No. 25.)

99 Die Grotte Giusti in Toskana. G. Galli (Rome).

100 Transactions of Prussian Medical Chambers. Henius (Berlin).—Verhandlungen der pr. Aerztekammern. Zweiter Bericht. 1905.

93. **Air Chamber to Facilitate Operations in the Thorax.**—In addition to the points previously mentioned in regard to the Sauerbruch air chamber (see page 1174) Mikulicz enumerates among its advantages the access it affords to all organs whose walls encroach on the chest. Extensive resection of ribs during ablation of tumors in the thorax wall, traumatic ruptures and hernia of the diaphragm are robbed of their principal danger. It may be possible to operate directly on the spine from its front aspect, and the possibility of resecting small, circumscribed foci in the lungs has drawn nearer. In operating on the heart we need not fear to open the pleura. From surgical intervention on the heart to restore conditions to normal after some casual injury, it is but a step to intentional interference to relieve certain organic heart defects. He refers especially to mitral stenosis, which he thinks might easily be enlarged by a fine, scissors-like instrument introduced into the ventricle, as Potter has already suggested.

94. **Fluorescent Substances.**—Tappeiner claims priority for the suggestion of sensibilizing substances to render them more susceptible to the action of light. (See THE JOURNAL, page 806.) He has coined the term photodynamic to express this action, and argues to show that it differs from true sensibilization in several important respects. He warns that erythrosin contains 57.7 per cent. iodin, which excludes it from current use in chronic tuberculous and syphilitic affections. Eosin contains bromin instead of iodin, and is therefore less dangerous while standing next to erythrosin in its optic properties.

95. **The "Scapular Grinding Sound."**—The sound has been likened to that made by a horse chewing oats, although in mild cases it is merely a staccato rubbing sound. It is due to various causes, from lung affections to fracture, and is produced by the rubbing of the scapula against the thorax. Treatment should be addressed to the primal cause.

97. **Chromo-Cystoscopy.**—Voelcker and Joseph describe their experiences to date with cystoscopy after ingestion of a certain amount of some stain. (See THE JOURNAL, page 69, paragraph 70.) The findings fully corroborate their preceding announcements as to the great value of this diagnostic measure and its ease and simplicity.

98. **Botryomycosis in Man.**—Frédéric gives an illustration of a lesion on the foot, and remarks that no recurrence has been known after excision of the focus and that the diagnosis is unmistakable after such a lesion has once been seen.

Münchener medicinische Wochenschrift, Munich.

101 (LI, No. 15.) *Theorie und Behandlung des Krebses (of cancer). A. Hegar.

102 *Zur Pathologie der Pankreas-Nekrose und Blutung. Hochhaus (Cologne).

103 *Ueber Erkrankung des Appendix verm. bei chronischer Amöben-Enteritis. G. Hoppe-Seyler (Kiel).

104 Experimentelle Untersuchungen über die Agglutination bei Tuberkulose. H. Schwarzkopf.

105 *Ueber hereditäre Syphilis des Herzens (of heart). B. Fischer (Bonn).

106 Ueber die Natur der Krystalle in Ikterischen Fæces. T. Kimura.

107 *Gibt es eine physiologische Albuminurie? A. Oswald (Zurich).

108 *Adrenalin am Krankenbett. B. Voigt.

109 Ueber das Pickersche Typhus-Diagnostikum. Ehrsam.

110 *Ueber die biologische Untersuchung von Mumien-Material vermittelst der Präzipitin-Reaktion. J. Mayer (Berlin).

111 Removal of Bone Impacted in Right Bronchus. H. Just.—Entfernung eines Fremdkörpers aus dem rechten Hauptbronchus.

112 Salit (von Heyden). Ein neuer Salicyl-Säure-Ester für die Inhorierung durch die Haut (through the skin). F. Müller.

113 Notiz zur "Mesotan-Behandlung." O. Niedner (von Leyden's clinic, Berlin).

114 *Bemerkungen über die Schlafkrankheit und ihr Auftreten in München. v. Schrenck-Notzing.

101. **Cancer and Its Treatment.**—Hegar concludes this clinical lecture by expressing his conviction that as general causes unmistakably favor the development of a malignant tumor, the discovery of some successful internal remedy is not without promise. We are unable to prevent old age, but we may be able to postpone senile alterations or at least diminish their influence. He thinks that our knowledge of cancer is already broad and thorough—the final discovery of the specific cause will be merely the last link in the chain. We are already trained in prophylactic measures, avoidance of irritation from pipes, caustics, sharp remains of teeth, etc., removal of warts, cure of cutaneous affections, ablation of gall bladder, prevention of stagnation of contents in alimentary canal and cure of erosions at the orifices with restriction of consumption of tobacco and alcohol. There is also the possibility of the discovery of some substance which, injected in sound tissue around the malignant focus, will prevent its spread.

102. **Necrosis of Pancreas.**—In the first of the two cases reported by Hochhaus the affection ran its course completely in nineteen hours and the necropsy two hours after death demonstrated that the necrosis of the gland tissue was the essential and primary factor in the syndrome. There was scarcely any hemorrhage or inflammation. Colon bacilli were found in the pancreas and in the blood in the liver. The patient was a man cook, 39 years old. The second patient was a man of 47, always healthy except for an attack of gallstone colic nearly two years before. He slipped on the lower stone step and fell with his right side on the sharp edge of a step, the trauma causing intense pain in the chest. After lying quietly in bed for a day he felt comparatively well. The third day symptoms of fulminating necrosis of the pancreas developed. The postmortem findings indicated that the trauma had induced a slight hemorrhage in the pancreas and that this in turn had caused necrosis.

103. **Appendix in Amœba Enteritis.**—Hoppe-Seyler warns that greater attention must be paid to the appendix in this condition, and cites a case to show that severe general sepsis is liable to result by way of an altered appendix.

105. **Inherited Syphilis of the Heart.**—Fischer does not know of another instance in which a child with serious hereditary syphilitic lesions in heart and liver lived to be five years old. He also emphasizes the suddenness of the death. Mraček

noted sudden death in 21 out of 88 cases he has collated of unmistakable syphilis of the heart. The findings in the case described were those of a fibrous myocarditis and endocarditis, with a calcified nodule in the right conus arteriosus which might have been the relics of a gumma.

107. **Is There a "Physiologic" Albuminuria?**—Oswald doubts whether we can accept any case of albuminuria as strictly physiologic. He admits, however, that the cases in which there is elimination of euglobulin may have a different prognosis from those in which there is no euglobulin. Further research is needed here.

108. **Adrenalin at the Bedside.**—Voigt writes from Davos that he has witnessed the prompt arrest of threatening hemoptysis in 2 cases after injection of 1 c.c. of a 1/1,000 solution of adrenalin. In both cases there was a marked but transient acceleration of the heart action. He explains its action as inducing—besides the increased heart action—an increased tonicity in the musculature of the vessels, evidenced by the pallor and the hard pulse. This tonicity is displayed most decidedly in the injured region, entailing rigid contraction of the musculature of the bleeding vessels. He urges experiments to determine whether animals after injection of adrenalin bleed less than the controls from a wound made afterward. He was unable to detect any action from administration of the adrenalin by the mouth.

110. **Biologic Blood Test of Mummies.**—Hansemann subjected to the biologic blood test scraps taken from the neck of an Egyptian mummy dating from the first dynasty and thus five thousand years old, also from the mummy of a child dating from the Greek dynasty, two thousand years ago, and also scraps from the leg of a Greek cadaver found in an Egyptian sarcophagus, not embalmed like the others. In every case the modern biologic blood test gave distinctly positive findings.

114. **The Hypnotised Dancer.**—In this communication from von Schrenck-Notzing the particulars of the engagement of the trance dancer mentioned in the news columns, page 1033, are related. She is a professional dancer and came to Munich on invitation of the Psychologic Society, under contract for five private demonstrations, between engagements at the Opera Comique at Paris and in London during May. The lay press made a sensation of her coming, and so many requests and demands were received from private parties and scientific societies for opportunity to see her, that the Psychologic Society, rather than to have her give private demonstrations in the clubs and officers' quarters or elsewhere, chose as the lesser evil to rent a theater and have her performances semi-public. More than 3,000 persons interested in science were bidden free to the performances, but 2,000 others paid high prices for admission, which guaranteed all expenses. Her emotional behavior is on the same plane as the tears shed by Sarah Bernhard and Duse, an ecstasy of autosuggestion, but no one has ever worried over the eventual harm to the nervous systems of the actresses. They take the risks of such performances the same as men who swallow knives or run needles through their tongues. He thinks that the trance dancer with corresponding training outside of the hypnotic state might be able to give fully as remarkable a performance, although different from that of her hystero-hypnosis. Her parents were professionals, a musician and a ballet dancer.

Therapie der Gegenwart, Berlin.

Last indexed page 276.

115 (XLV, No. 2.) *Collargol als Prophylacticum gegen septische Prozesse. J. Camerer.
115½ Zur Behandlung des Abdominal-Typhus. F. Müller. (Commenced in No. 1.)
116 Success of Thiosinamin and Massage in Cure of Hour-glass Stomach. von Tabora.—Zur unblutigen Behandlung narbiger Magen-Veränderungen.
117 Salicylic Medication and Kidneys. T. Brugsch.—Salicylbehandlung und Niere.
118 Isopral. M. Uretein.
119 Zur Behandlung des Aborts. G. Winter.
120 Recent Works on Immunisation Against Tuberculosis. F. Klemperer.
121 Ibid. on Infant Feeding. H. Finkelstein.
122 (No. 3.) *Zur Therapie schwerer Diabetes-Fälle. L. Loening (Naunyn's clinic, Strassburg).
123 Yeast in Therapeutics. P. Krause (Breslau).—Untersuchungen einiger Dauerhefepräparate des Handels mit Berücksichtigung ihrer biologischen Eigenschaften und therapeutischen Verwertbarkeit.
124 *Zur Serum-Behandlung des Gelenkrheumatismus (articular rheumatism). Schaefer (Pankow).
125 *Die Therapie des Myxoedem. A. Magnus-Levy (Berlin). (Concluded.)
126 *Perubals und Cypressen-Oel. O. Soltmann (Leipsic.)
127 Indikationen für die Anwendung orthopädischer Apparate. G. Muller (Berlin).
128 Die kaukasischen Mineral-Wässer und der 2 altrussische Balneologen-Congress. N. Grünstein (Riga). (Concluded.)
129 *Zur Kenntnis des Thiosinamins. A. Lewandowski (Berlin).
130 Enteroptosis with Disturbances in Digestive and Circulatory Apparatus Cured by a Simple Adhesive Plaster Bandage. N. Rosewater (Cleveland).—Enteroptose mit Störungen, etc.
131 Success of Alcohol Compresses in Treatment of Chilblains. O. Lentz.—Behandlung von Frostbeulen mit Salswedeschen Alkoholverbänden.

115. **Collargol as a Prophylactic of Septic Processes.**—Camerer practices in a small town, Wertheim a. Main, and its vicinity, and has found inunctions of collargol invaluable as a prophylactic measure. Especially in country practice, where conditions are so unfavorable for asepsis, he has found all menacing complications averted by this simple measure. He prefers to use the collargol in the form of an unguent, as he thinks it is absorbed gradually and evenly over a large surface while this mode of administration is so simple and easy that it does not disturb the patient and it can be safely left to any member of the family. He orders 3 gm. of the Credé unguent to be rubbed into the legs and back alternately, twice a day, the rubbing continued for thirty to forty minutes, until the skin, which is stained black at first, grows a lighter color. He has thus treated 30 parturients, including 3 cases of manual detachment of the placenta, 4 requiring tamponing on account of postpartum hemorrhage, and one case of laceration of the cervix requiring suture. Notwithstanding that the circumstances in these cases invited infection, there was no rise of temperature in any instance.

122. **Treatment of Severe Diabetes.**—Naunyn has long proclaimed that the quantity of the food is of more import than the quality in cases of severe diabetes. He believes that the diabetic needs as many calories as a healthy person, but that for therapeutic purposes it is allowable to reduce the number below the standard. The calories needed may be supplied in fats to supplement the albumin. Usually there is pronounced acidosis in consequence, but if the amount of both albumin and fats is kept down, the sugar in the urine may progressively diminish and finally disappear altogether, and with it the acidosis. Months may be required before this consummation is reached, but that it can be reached is shown by the 2 examples cited. The acidosis was kept under control by large doses of sodium bicarbonate, sufficient to keep the urine alkaline. Both were cases of severe diabetes in young subjects. The first was a young woman with 273 gm. sugar on an unrestricted diet. On a diet of 85 gm. albumin and 215 gm. fat —a total of 2,275 calories—the sugar dropped to 15 gm. a day. Restricting the amount of albumin and fats still lower, to a total of 1,500 calories equivalent to 28 calories per kilogram, the acidosis began decline, and with 24 to 27 calories per kilogram both sugar and acidosis had vanished. They returned to a slight extent after indiscretions in diet. The aggravating effect of menstruation was particularly noticeable in this case, as also the return of the menses after long suppression as the patient improved. The acidosis in both cases diminished proportionately much more than corresponded to the restriction of fats. It is evident that it is not proportional to the intake of carbohydrates either directly or the reverse, but the testimony is all in favor of the assumption that it parallels the sinking in the formation of sugar out of albumin. Consequently we are unable to detect any direct influence on the acidosis from the intake of carbohydrates or their suppression, but the acidosis is manifestly dependent on the tolerance. The tolerance was increased in these 2 cases, however, not by suppression of the carbohydrates alone, but by simultaneous restriction of the albumin and fat in the food.

124. **Serum Treatment of Articular Rheumatism.**—Schaefer treated 6 cases of articular rheumatism in adults and children with Menzer's antistreptococcus serum, with the best

results. The attacks were much shortened and the health afterward unusually good. No by-effects were noticed.

125. **Treatment of Myxedema.**—Magnus-Levy draws the picture of myxedema and sporadic cretinism with special reference to the frequently unrecognized indefinite forms, the "formes frustes." Thyroid treatment is liable to prove effectual even in very old and inveterate cases. Unpleasant surprises sometimes occur, which he thinks are usually due to having overshot the mark and induced hyperfunction in the thyroid gland. There is no testimony as yet in favor of the cure of endemic cretinism by this means, but it is not impossible. When patients begin to improve the persistence and progress of the improvement depend on the continued application of the thyroid treatment.

126. **Cypress Oil in Whooping Cough.**—Bravo poured a few drops of cypress oil on the clothes and pillows of children with whooping cough and reported remarkably fine results from its use. Soltmann corroborates his testimony and reports here the clinical histories of 19 cases of pertussis treated in this way. The number of paroxysms was promptly and rapidly diminished, and they were much shorter and less intense, the intervals were longer and the debilitating after-effects much reduced. The influence of the remedy was most apparent when it was suspended for a time and then resumed, its effect on the paroxysms being unmistakably evident. He used a 1/8 alcoholic solution of the oil and poured 10 to 15 gm. on the pillow, upper part of the bed and the underclothes of the child, repeating this four times a day. The only drawback was that the oil left stains on the linen.

129. **Thiosinamin to Soften Cicatricial Tissue.**—Lewandowski remarks that he has been overwhelmed with questions as to the action of thiosinamin since his publications on the subject. He states comprehensively in reply that it is immaterial how long the cicatrix has existed for it to be amenable to thiosinamin, except that possibly it is better to wait a while in case of recently-formed scar tissue. He has been successful with cicatrices thirty years old. He prefers the subcutaneous mode of administration and states that no one has reported any ill effects of any kind from its use. The injection does not have to be made in the vicinity of the cicatrix. The thiosinamin works through the blood, and the site of injection is immaterial. He describes a case recently observed in which synechia of the iris required instillation of homatropin—the subject a lad with scarlet fever and diphtheria, the disturbance in the left eye having much reduced the vision. Thiosinamin was injected subcutaneously at the same time that the homatropin was instilled and it had an unmistakably favorable action, evidently softening and preparing the soil for the homatropin to work on. See title 116 above, and also pages 905 and 1111.

Cronica Medica, Lima, Peru.
Last indexed XXXIX, page 382.

132 (XIX, No. 330.) Circoid Aneurism of the Ear Region, 8 Years After Contusion. C. S. Alscorbe.—Caso de aneurisma circoideo.

133 (Nos. 331-332.) La colleotomia vaginal en las afecciones pelvicas. A. de Tello.

134 (No. 334.) Comparative Study of the Specific Germ of Carrion's Disease and the Colon Bacillus. A. L. Barton (London).—Estudio comparativo, etc.

135 (No. 339.) Ligeras consideraciones sobre la enterocolitis mucomembranosa. C. A. M. Carreras. (Commenced in No. 334.)

136 (No. 340.) Anatomic pathologique de verrucome de Carrion. E. R. Escomel.

137 (No. 342.) Report of National Anti-Alcohol Congress Held at Lima, Jan. 2, 1903.

138 (No. 343.) *Tubal Pregnancy Perforating Into Bladder. D. Matto.—Embarazo tubario derecho que se abrio paso por la vejiga.

139 (Nos. 344-346.) Hematology of Carrion's Disease (Peruvian Verruga). U. Illi.—Sobre las hemoesgrutininas de la sangre umana y la hematologia de la enfermedad de Carrion.

140 Algo sobre la peste bubonica. C. Oiaechea.

141 (No. 347.) *Tonsils and Palate in Tuberculous Subjects. E. R. Escomel.—Las amigdalas palatinas y la uvula en los tuberculosos.

142 (Nos. 349-350.) La tuberculosis en el ejercito nacional (in Peruvian army). F. Merkel.

143 (No. 353.) *Penetracion del bacilo tuberculoso en la amigdala del hombre. E. R. Escomel.

138. **Perforation of Tubal Pregnancy into Bladder.**—Matto describes a case which had been previously and perseveringly treated on the assumption of urinary calculi, as the patient, a multipara of 35, complained of distress and the sensation of foreign bodies in the bladder. Instrumental examination disclosed a bone, supposed to be that of a chicken at first, but further investigation showed the bladder to be nearly full of bones. The patient six years before had passed through what was assumed to be a six-month abortion, and intrauterine douches had been applied. The menses had been regular since and there had been no symptoms except the presence of a small, hard tumor in the right side and the supposed "urinary calculi." Nearly the entire skeleton of a fetus almost at term was removed piece by piece from the bladder, the missing bones probably having passed and been accepted as calculi, until she began to experience great pain in the region of the tumor, with vomiting, and the urine became dark red and terribly fetid. Alkalines and lithia salts had been prescribed until the discovery of the bones. Six years had evidently elapsed between the tubal abortion and the perforation into the bladder, and the presence of the decomposing fetus had caused no appreciable symptoms during this interval. The tolerance of the bladder for the foreign bodies was also remarkable. The bones first passed and assumed to be urinary calculi had been examined by a druggist—not by a physician—which explains their non-recognition. Matto adds in conclusion a somewhat similar case related in the *Mercurio Peruano* more than a century ago. The patient was a girl of 16 who had aborted in consequence of pounding her abdomen against a door in a passion. The fetus could be palpated from without, but the physician found the foot projecting from the urethra. The entire leg came with the foot, the next day the other leg, five days later other bones were voided and this continued, a few bones at a time, for several weeks. Two or three years later the skull presented and was extracted, but caused such traumatism that there was incontinence of urine thereafter.

141 and 143. **Tubercle Bacilli and the Tonsils.**—Escomel regards the tonsils as the most tuberculizable organs of the entire alimentary canal. He has found tubercle bacilli in them even in healthy subjects, and thinks that tuberculous infection of these organs is frequent and extremely easy, while the diagnosis is difficult. The infection is generally exogenic, but once installed the general lymphatic system is liable to become invaded and no one can say where the infection will end.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

PROCEEDINGS OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION, at the Fifty-ninth Annual Meeting, Held in Washington, D. C., May 12-15, 1903. Paper. Pp. 507. Published by the Association. 1903.

GRAVES' DISEASE WITH AND WITHOUT EXOPHTHALMIC GOITER. By William Hanna Thompson, M.D., LL.D., Physician to the Roosevelt Hospital, New York. Cloth. Pp. 143. Price, $1.50 net. New York: Wm. Wood & Co. 1904.

A GUIDE TO THE CLINICAL EXAMINATION OF THE BLOOD FOR DIAGNOSTIC PURPOSES. By Richard C. Cabot, M.D. With Colored Plates and Engravings. Fifth Revised Edition. Cloth. Pp. 349. Price, $3.50 net. New York: Wm. Wood & Co. 1904.

REPORT OF THE COMMISSION TO INVESTIGATE THE CONDITION OF THE ADULT BLIND IN THE STATE OF NEW YORK. Transmitted to the Legislature Feb. 1, 1904. Paper. Pp. 73. Albany: Oliver A. Quayle. 1904.

A SYSTEM OF PRACTICAL SURGERY. By Prof. E. von Bergmann, M.D., of Berlin, Prof. von Bruns, M.D., of Tübingen, and Prof. J. von Mikulicz, M.D., of Breslau. Volume II. Translated and Edited by William T. Bull, Professor of Surgery, College of Physicians and Surgeons, Columbia University, New York, and Carlton P. Flint, M.D., Instructor in Minor Surgery, College of Physicians and Surgeons, New York. Surgery of the Neck, Thorax and Spinal Column. Cloth. Pp. 830. Price, $4.00 net. Two Volume. New York and Philadelphia: Lea Brothers & Co. 1904.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS, Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, Issued Monthly. Under the General Editorial Charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Volume IV. Gynecology. Edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School, and William Healy, A.B., M.D., Instructor in Gynecology, Northwestern University Medical School. March, 1904. Cloth. Pp. 216. Price, $1.00. Chicago: The Year Book Publishers.